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The Endowment Effect in IP Transactions: The Case against Debiasing

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THE ENDOWMENT EFFECT IN IP TRANSACTIONS: THE CASE AGAINST DEBIASING

Ofer Tur-Sinai*

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This Article contains a critical discussion of recent studies by Christopher Buccafusco and Christopher Sprigman concerning the role of the endowment effect in intellectual property transactions. According to the thesis presented in these studies, the existence of an endowment effect in the markets for IP goods causes inefficiencies. In order to counteract such inefficiencies, the authors argue, IP rights must be weakened in various ways, including shifting toward liability rules, adding formalities in copyright law, and expanding the fair use doctrine.

The thesis as presented is groundbreaking and would have broad implications. This Article, however, points out several shortcomings of the thesis and its ensuing conclusions. To begin with, the experiments upon which the thesis is based are not representative of real IP markets. To the extent that the endowment effect as illustrated does characterize actual IP transactions, debiasing through law is not an appropriate response to this phenomenon. As demonstrated in this Article, heightened valuations of IP goods are often driven by emotional attachment, making such valuations fully consistent with the rational choice model. Furthermore, this Article argues that over-optimism, another factor that inflates the valuation of IP goods, is a phenomenon that society should commend in the context of creative activity rather than condemn. This Article posits that the authors' proposed changes to the current structure of IP law are not only unnecessary in order to ensure efficiency in the markets for IP goods, but might, in fact, circumvent the ability of our IP system to achieve its prescribed goals.

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INTRODUCTION

Criticism of intellectual property ("IP") rights is as old as the rights themselves.¹ Even so, over the past decade, intellectual property laws have been under heightened attack from multiple directions, with calls to weaken legal protection awarded to creators and inventors becoming commonplace.²

1. See, e.g., Robert G. Bone, *Hunting Goodwill: A History of the Concept of Goodwill in Trademark Law*, 86 B.U. L. REV. 547, 570–72, 589–92 (2006) (discussing early criticism of trademark protection based on fears of monopolies); Susan Sell, *Intellectual Property and Public Policy in Historical Perspective: Contestation and Settlement*, 38 LOY. L.A. L. REV. 267 (2004) (surveying the history of intellectual property protection and describing, *inter alia*, the major historical controversies concerning copyright and patent protection).

2. See, e.g., Irene Segal Ayers, *The Future of Global Copyright Protection: Has Copyright Law Gone Too Far?*, 62 U. PITT. L. REV. 49, 86 (2000) (arguing that "[t]oday, when the 'authors' whose rights are being protected are large international multimedia corporations, expansions in copyright protection restrict and diminish the ordinary individual citizen's access to literary and artistic works"); Julia Alpert Gladstone, *Why Patenting Information Technology and Business Methods Is Not Sound Policy: Lessons from History and Prophecies for the Future*, 25 HAMLINE L. REV. 217, 219 (2002) (arguing that the present patent system "does not encourage new innovation but rather entrenches the monopoly rights

In two recent articles, both by Christopher Buccafusco and Christopher Sprigman,³ a new line of criticism of IP law's current regime has emerged.⁴ The articles, based on experiments conducted by the Writers, report the existence of an endowment effect in connection with IP goods. The term "endowment effect" refers to the tendency of people in certain circumstances to value goods more highly when they own them than when they do not.⁵ Numerous experiments conducted in a wide array of settings establish that individuals typically demand a higher price to give up an entitlement than they would be willing to pay in order to purchase it.⁶ The Writers argue that their experiments extend prior research by showing that the valuation of IP goods increases even more when the creator herself owns the good in question; the Writers name such heightened valuation the "creativity effect." The presence of an endowment effect and a creativity effect in the markets for IP goods suggests, according to the Writers, that such markets suffer from a high degree of inefficiency. In order to deal with the alleged inefficiencies, the Writers propose several changes to IP law, including a shift away from property rules and toward liability rules, the introduction of formalities into copyright law, the expansion of the fair use doctrine, and a broader use of doctrines vesting ownership of creative goods in some person other than the creator.

of existing propertied patent holders"); Mark S. Nadel, *How Current Copyright Law Discourages Creative Output: The Overlooked Impact of Marketing*, 19 BERKELEY TECH. L.J. 785 (2004) (exploring how copyright law's prohibition against unauthorized copying and sales may, counter to the law's purported goal, have an overall negative impact on the production and dissemination of creative content); Tom Saunders, Case Comment, *Renting Space on the Shoulders of Giants: Madey and the Future of the Experimental Use Doctrine*, 113 YALE L.J. 261 (2003) (criticizing the narrow construction of the experimental use defense in patent law); Andrew W. Torrance & Bill Tomlinson, *Patents and the Regress of Useful Arts*, 10 COLUM. SCI. & TECH. L. REV. 130, 166–67 (2009) (presenting an empirical study showing that the "orthodox" assumption that patents spur technological innovation is not necessarily true).

3. Hereinafter, Christopher Buccafusco and Christopher Sprigman will be referred to interchangeably as "Buccafusco and Sprigman" or collectively "the Writers."

4. Christopher Buccafusco & Christopher Sprigman, *Valuing Intellectual Property: An Experiment*, 96 CORNELL L. REV. 1 (2010) [hereinafter Buccafusco & Sprigman, *Valuing*]; Christopher Buccafusco & Christopher Jon Sprigman, *The Creativity Effect*, 78 U. CHI. L. REV. 31 (2011) [hereinafter Buccafusco & Sprigman, *Creativity*]. These articles will be collectively referred to as "the Studies."

5. See, e.g., Daniel Kahneman et al., *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325, 1326 (1990) (describing the endowment effect as "a manifestation of 'loss aversion'"); Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 NW. U. L. REV. 1227, 1228 (2003); Daphna Lewinsohn-Zamir, *The Choice Between Property Rules and Liability Rules Revisited: Critical Observations from Behavioral Studies*, 80 TEX. L. REV. 219, 250 (2001); George Lowenstein & Samuel Issacharoff, *Source Dependence in the Valuation of Objects*, 7 J. BEHAV. DECISION MAKING 157, 158 (1994).

6. See, e.g., Eric van Dijk & Daan van Knippenberg, *Trading Wine: On the Endowment Effect, Loss Aversion, and the Comparability of Consumer Goods*, 19 J. ECON. PSYCHOL. 485, 486 (1998); Kahneman et al., *supra* note 5, at 1332.

Buccafusco and Sprigman's empirical studies of valuations attributed to IP goods by their creators, owners, and potential buyers constitute a promising line of research. While I have only minor criticisms of the Writers' empirical methodology, I disagree with their analysis and conclusions. As demonstrated below, the data gathered in the Studies does not provide sufficient support for the proposed weakening of IP rights.

This Article proceeds as follows: Part I provides general background with respect to the endowment effect. Part I also describes the experiments conducted by Buccafusco and Sprigman. The remainder of the Article contains a critical analysis of the Studies.

Part II argues that the Writers mischaracterize their findings. First, they emphasize the uniqueness of their finding that the endowment effect exists in the case of a good created by its owner, while in fact this finding was anticipated by previous studies of the endowment effect. Second, they emphasize their finding that an endowment effect exists in connection with non-rival goods; yet, as Part II illustrates, the non-rivalry of IP goods hardly played a part in the experiments conducted by the Writers.

Part III argues that the experiments underlying the Studies are not indicative of the actual conditions in IP markets. While the experiments deal with a very specific type of transaction—the assignment of an IP good—the most common form of dealing in IP rights is licensing. Part III shows that in the context of licensing, there is generally a much lower chance that valuation anomalies will block the parties from agreeing on a price. Part III further describes some other market factors that serve to mitigate any endowment effects.

Part IV argues that even to the extent the endowment effect might characterize IP markets, there is no normative case for debiasing through legal intervention.⁷ There are two main reasons.

First, efficient allocation of an IP good is not necessarily dictated by whether the good is located in the hands of the party who values it the most. Therefore, even if endowment effects prevent certain transfers to parties who most highly value IP goods, a change in IP law is not necessarily justified. In fact, from a dynamic efficiency point of view, such change may be counter-efficient, as it may decrease incentives for the creation of IP goods *ex ante*.

Second, an examination of the reasons for endowment effects in IP transactions reveals that such effects do not necessarily reflect irrational mistakes that require correction. In particular, this Article argues that emotional attachment plays an important role in the valuation of IP goods and shows that valuation driven by such attachment is consistent with the rational choice model and, therefore, does not warrant debiasing. Furthermore,

7. Debiasing is the action of steering people in more rational directions by operating directly on their behavior. See Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199, 199 (2006).

this Article argues that the over-optimism of creators—another factor that seems to affect valuation—does not necessarily lead to inefficiency.

Part V contains a critical discussion of the remedial proposals made in the Studies. This Article argues that these proposals fail to give due consideration to certain negative effects that the suggested changes may have on our IP system. This Article also argues that the recommendations are overbroad and not sufficiently tailored to the specific problems they are meant to address.

While embracing the general line of inquiry embodied in Buccafusco and Sprigman's Studies, this Article refutes the Writers' conclusion that their data effectively illustrates an actual problem that warrants a change in current IP law.

I. BACKGROUND

A. *The Endowment Effect*

Classical economic theory assumes that the value ascribed by an individual to an item is endogenous and based on an individual's internal preferences, which are not affected by whether the individual owns the item.⁸ Extensive research conducted in the social sciences in recent decades has shown, however, that the initial allocation of an item does affect how people value it.⁹ It appears that people tend to place a higher value on goods when they own them than when they do not.¹⁰ As a result, individuals typically demand a significantly higher price to give up an already-owned good than they would be willing to pay in order to purchase the same good.¹¹ The

8. See, e.g., Eric van Dijk & Daan van Knippenberg, *Buying and Selling Exchange Goods: Loss Aversion and the Endowment Effect*, 17 J. ECON. PSYCHOL. 517, 518 (1996) (pointing out that "economic theory assumes that preferences are not affected by ownership"); Kahneman et al., *supra* note 5, at 1326 (noting that under the standard assumptions of economic theory, "indifference curves are drawn without reference to current endowments"); Russell Korobkin, *Policymaking and the Offer/Asking Price Gap: Toward a Theory of Efficient Entitlement Allocation*, 46 STAN. L. REV. 663, 667 (1994) (noting that "traditional economic decision-making models assume that people form preferences independently of whether they own entitlements").

9. Korobkin, *supra* note 8, at 667.

10. Korobkin, *supra* note 5, at 1228; Lowenstein & Issacharoff, *supra* note 5, at 158.

11. See, e.g., Jennifer Arlen, *The Future of Behavioral Economic Analysis of Law*, 51 VAND. L. REV. 1765, 1771 (1998); Korobkin, *supra* note 5, at 1228; Lewinsohn-Zamir, *supra* note 5, at 250; David R. Mandel, *Beyond Mere Ownership: Transaction Demand as a Moderator of the Endowment Effect*, 88 ORGANIZATIONAL BEHAVIOR & HUMAN DECISION PROCESS 737, 737 (2002); Carey K. Morewedge et al., *Bad Riddance or Good Rubbish? Ownership and Not Loss Aversion Causes the Endowment Effect*, 45 J. EXPERIMENTAL SOC. PSYCHOL. 947, 947 (2009). The endowment effect can also manifest itself as a reluctance to exchange objects in one's possession for other objects of comparable dollar value. See, e.g., Kahneman et al., *supra* note 5, at 1341–42 (describing an experiment in which participants endowed with coffee mugs were reluctant to trade their mugs for chocolate bars, whereas

phenomenon whereby the minimum price that people are willing to accept (“WTA”) to give up an item they own is higher than the maximum price they would be willing to pay (“WTP”) to acquire the very same item has been termed the “endowment effect.”¹²

The endowment effect is considered “one of the most important and robust empirical regularities to emerge from the field” of behavioral economics.¹³ The effect has been studied extensively by social scientists.¹⁴ A broad array of experiments using various methodologies has detected its existence in connection with many different types of endowments,¹⁵ including a variety of tangible consumer items,¹⁶ lottery tickets,¹⁷ governmental permits,¹⁸ and even the right to enjoy open landscapes.¹⁹ The existence and extent of the endowment effect has proven to be context-dependent.²⁰ For example, researchers observe that the effect is stronger when the good in question is obtained as a result of skill or performance rather than as a result of chance.²¹ A few explanations have been offered for why the endowment effect exists²²—including, most notably, loss aversion²³ and emotional attachment²⁴—but none of these factors account for the effect completely.²⁵

Since the formulation of the endowment effect by social scientists, it has become an important topic of discussion and application in legal aca-

participants endowed with chocolate bars were reluctant to trade their chocolate bars for coffee mugs).

12. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 4; Mandel, *supra* note 11, at 737; van Dijk & van Knippenberg, *supra* note 6, at 486.

13. Lowenstein & Issacharoff, *supra* note 5, at 158.

14. See John K. Horowitz & Kenneth W. McConnell, *A Review of WTA/WTP Studies*, 44 J. ENVTL. ECON. & MGMT. 426, 426 (2002) (surveying such studies).

15. Korobkin, *supra* note 5, at 1235.

16. See, e.g., Ian Bateman et al., *A Test of the Theory of Reference-Dependent Preferences*, 112 Q. J. ECON. 479 (1997) (exploring the effect in connection with chocolate bars and cans of Coke); Kahneman et al., *supra* note 5, at 1332 (detecting the effect in connection with coffee mugs, chocolate bars, and ballpoint pens).

17. See, e.g., Maya Bar-Hillel & Efrat Neter, *Why Are People Reluctant to Exchange Lottery Tickets?*, 70 J. PERSONALITY & SOC. PSYCHOL. 17 (1996); Jack L. Knetsch & J.A. Sinden, *Willingness to Pay and Compensation Demanded: Experimental Evidence of an Unexpected Disparity in Measures of Value*, 99 Q.J. ECON. 507 (1984).

18. See, e.g., Richard C. Bishop & Thomas A. Heberlein, *Measuring Values of Extra-market Goods: Are Indirect Measures Biased?*, 61 AM. J. AGRIC. ECON. 926 (1979) (detecting the effect in connection with hunting licenses).

19. See, e.g., Robert D. Rowe et al., *An Experiment on the Economic Value of Visibility*, 7 J. ENVTL. ECON. & MGMT. 1 (1980).

20. Korobkin, *supra* note 5, at 1229.

21. Lowenstein & Issacharoff, *supra* note 5, at 165.

22. See generally *infra* Part IV.B.

23. Loss aversion is the tendency to view financial losses from a given benchmark as more painful than forgone gains. See *infra* notes 154–174 and accompanying text.

24. See *infra* notes 175–182 and accompanying text.

25. See Korobkin, *supra* note 5, at 1229 (arguing that the explanation for the endowment effect is “not well understood”).

demic literature.²⁶ One of the most important implications of the endowment effect for legal analysis is that it undermines the Coase Theorem.²⁷ The Coase Theorem posits that when transaction costs are low, the initial allocation of property rights will not affect their final allocation because efficient transactions will occur, leaving property rights in the hands of the party who most values them.²⁸ The existence of the endowment effect, however, implies that the initial allocation of property rights may affect the outcome of bargaining even when transaction costs are low. Thus, in settings where the endowment effect may exist, policymakers must take its existence into account when making decisions regarding the initial allocation of property rights.

B. *The Recent Experiments*

Recently, Buccafusco and Sprigman conducted two sets of experiments in order to examine the endowment effect in connection with creative works.

In the first experiment,²⁹ the subjects were randomly divided into three groups: Authors, Bidders, and Owners. The Authors were told that they would compete in a haiku-writing competition in which the writer of the best poem would be awarded a \$50 prize. It was explained to the Authors that the Bidders would be given an opportunity to buy the Authors' chance of winning the prize. Each Author was then asked to indicate the lowest amount she would be willing to accept (WTA) to sell her chance. The Authors were instructed that if the Bidder paired with an Author offered a price higher than the Author's WTA, such Bidder would buy the Author's chance of winning the prize. The Authors were further notified that they were exchanging only their chance to win and that the poem itself would still be theirs.³⁰ Subsequently, each Bidder was shown the poem to which she was paired and was asked to indicate the highest price she would be willing to pay (WTP) to purchase the poem's chance of winning the prize. Finally, the Owners were simply assigned to poems and asked to indicate their WTA.

26. *Id.* See also Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 13–14 (surveying some of the fields of substantive and procedural law where scholars have applied the endowment effect).

27. See, e.g., Korobkin, *supra* note 8, at 664; Lewinsohn-Zamir, *supra* note 5, at 251.

28. Ronald H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1, 7–8 (1960).

29. The following description of the experiment is based on Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 19–25.

30. *Id.* at 20 (explaining that this reminder was meant to “help focus Authors’ attention solely on the poem’s value as an entry in the Contest rather than on any personal or use value that they might attach to it”).

The results of the experiment showed a substantial gap between the WTA of Authors and Owners and the WTP of Bidders.³¹ Surprisingly, no significant gap was detected between Author and Owner valuations.³² The results did not change notably when the experiment was repeated with “eyes open,” i.e., when instead of just being shown the poem that they were allowed to buy or sell, subjects were shown all poems that would be competing in the contest.³³ The experiment was repeated one last time in which the quality-based contest of the initial study was substituted for a lottery and the subjects were informed that the winning poem would be selected at random.³⁴ Once again, a significant gap between the WTA of Authors and Owners and the WTP of Bidders was observed, though valuations for each of the roles were lower in general than they were in the contest scenarios.³⁵

A second set of experiments,³⁶ conducted separately, was designed to further examine whether transactions involving authors of creative works, who are internally motivated, at least in part, and expend significant creative effort on their works,³⁷ will manifest a significantly larger WTA/WTP gap relative to that produced by transactions involving mere owners.³⁸ The same methodology was used, but the subjects this time were painting students at an art school (hereinafter, the “Painters”) who were instructed to choose one of their paintings to submit to a contest with a one-in-ten chance to win a \$100 prize.³⁹ The Painters were told that they would be matched with Buyers who would make an offer to buy the Painters’ chance to win the prize and were asked to indicate the lowest amount at which they would sell their chance to win (WTA). The Buyers, random law students, were each matched with one of the paintings and asked to give an offer to purchase the painting’s chance to win the prize (WTP).⁴⁰ If the Buyer offered an amount equal to or higher than the Painter’s WTA amount, the Buyer would buy the

31. *Id.* at 20–21. The average willing-to-accept (WTA) price of the Authors was \$22.90, the average WTA price of the Owners was \$21.23, and the average willing-to-pay (WTP) price of the Bidders was \$10.38.

32. Possible explanations for the lack of such gap suggested by Buccafusco & Sprigman are: (1) the Authors were not internally motivated to create the poems but rather were told to do so, and thus they acted without a “spark” of creative motivation; and (2) the amount of creative effort in the study was small. *Id.* at 29.

33. *Id.* at 21–22. The average WTA price of the Authors was \$20.18, the average WTA price of the Owners was \$23.95, and the average WTP price of the Bidders was \$9.17.

34. *Id.* at 23–24.

35. *Id.* at 24. The average WTA price of the Authors was \$18.92, the average WTA price of the Owners was \$15.98, and the average WTP price of the Bidders was \$5.60.

36. The following description of the experiment is based on Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 36–40.

37. This is in contrast to the Authors participating in the first set of experiments. See *supra* text accompanying note 32.

38. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 36.

39. *Id.* at 37.

40. *Id.* at 38.

chance to win the prize. The Painters were assured that they could keep their paintings.⁴¹ A third group of subjects, the Owners (also random students), were assigned to specific paintings and, similar to the Painters, asked to indicate their WTA amount.⁴²

Similar to the first set of experiments, a significant gap was observed between the Painters' and Owners' WTA and the Buyers' WTP.⁴³ This time, however, the Painters' valuations were even higher than the Owners' valuations.⁴⁴ This shows, according to Buccafusco and Sprigman, "that transactions in IP are also subject to a separate *creativity effect*—a valuation anomaly, distinct from endowment effects, which may affect the way in which the originators of creative works assign value to their creations."⁴⁵

According to the Writers, the basic WTA/WTP gap observed in both sets of experiments indicates that IP transactions may occur at a frequency that is significantly suboptimal,⁴⁶ while the separate creativity effect detected in the second experiment "further enlarges the gap that endowment effects already create between the price at which creators are willing to transfer their work and the price that buyers are willing to pay."⁴⁷ In order to account for the inefficiencies created by the observed effects and debias IP owners, Buccafusco and Sprigman suggest several changes in IP law, including: (1) reexamining IP law's general preference for property rules over liability rules;⁴⁸ (2) reformulating copyright's remedial provisions to limit owners of unregistered works to the effective equivalent of a liability rule;⁴⁹ (3) utilizing doctrines like fair use to allow secondary uses that otherwise would not be permitted;⁵⁰ and (4) "encouraging initial ownership of IP rights in some person or firm other than the creator."⁵¹

41. *Id.* (noting that "[t]he Painters were reminded in bold that they were not transferring the paintings themselves or any rights in them other than the chance at the prize awarded to the winning painting").

42. *Id.*

43. *Id.* at 39–40. The average WTA price of the Painters was \$74.53, the average WTA price of the Owners was \$40.67, and the average WTP price of the Buyers was \$17.88.

44. *Id.*

45. *Id.* at 32.

46. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 47; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 4. By "suboptimal," they mean that fewer mutually beneficial transactions will take place because of the effects than would take place in the absence of such biases. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 4 n.16.

47. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 32.

48. *Id.* at 51–52; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 33–35.

49. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 50–51; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 36–42.

50. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 42–44.

51. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 49. This recommendation is meant to deal specifically with the creativity effect identified in the second experiment. *See id.* at 48–50.

II. CRITICAL ANALYSIS: A MISSTATED PRESENTATION OF THE RESULTS

In the Studies, Buccafusco and Sprigman emphasize the uniqueness of their findings. They state that “no study has explored the existence of an endowment effect for property that, like IP, (1) was actually created by the Owners and (2) is non-rival (i.e., a good where consumption by one person does not prevent consumption by another).”⁵² This presentation of the results appears to be overstated and somewhat erroneous. With respect to the first prong, while it is true that the endowment effect has never been empirically tested before in connection with IP goods, various scholars in the field have previously discussed it,⁵³ and its existence with respect to IP goods could be inferred from general studies examining the effect in other contexts. With respect to the second prong, it appears that the Studies fall short of their stated purpose by failing to actually explore the endowment effect in connection with non-rival goods.

A. *Endowment Effect with Respect to Goods Created by the Owners*

The Writers emphasize the uniqueness of their finding that the endowment effect exists in relation to a good created by its owner.⁵⁴ They also devote a separate discussion to the so-called “creativity effect”—the revelation that the endowment effect exhibited by creators in relation to their works is stronger than the endowment effect exhibited by mere owners.⁵⁵

52. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 4.

53. See, e.g., Thomas F. Cotter, *Pragmatism, Economics and the Droit Moral*, 76 N.C.L. REV. 1 (1997) (discussing the endowment effect in connection with copyright law); Jolls & Sunstein, *supra* note 7, at 220–22 (discussing the endowment effect in connection with IP law); Korobkin, *supra* note 5, at 1253, 1259 (giving moral rights as an example in a discussion of the endowment effect and discussing the endowment effect in connection with the fair use doctrine in copyright law); Gideon Parchomovsky, *On Trademarks, Domain Names, and Internal Auctions*, 2001 U. ILL. L. REV. 211, 223–24 (arguing that a combination of the endowment effect and self-serving biases impair the sale and licensing of trademarks); Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. U.L. REV. 1165, 1194 (2003) (noting that inventors and designers might demand too much to license their inventions, though not mentioning the endowment effect as such); A. Michael Warnecke, Note, *The Art of Applying the Fair Use Doctrine: The Postmodern-Art Challenge to the Copyright Law*, 13 REV. LITIG. 685, 701 (1994) (discussing the endowment effect in connection with the fair use doctrine in copyright law). This is in addition to the references listed (as exceptions) by the Writers themselves. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 15 n.85.

54. See, e.g., Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 16. “[O]ne area that has yet to be probed is whether the endowment effect extends to goods that an owner has created. In all previous experiments, the Owners have either simply been given the goods that they are then asked to value or, occasionally, have done something to earn them. None of the previous experiments asked subjects to actually create an object and then value it.” *Id.*

55. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 32 (noting that “transactions in IP are also subject to a *separate* creativity effect”) (emphasis added). The presentation of

These findings are far from surprising. The endowment effect is known to exist with respect to a variety of goods,⁵⁶ and the standard explanations offered for its existence are applicable to creative goods as well.⁵⁷ In fact, there is every possible reason to believe that the endowment effect exhibited by creators with respect to their works would be particularly noticeable.⁵⁸ This follows from the general observation that the manner in which an owner obtains an object has influence on such owner's valuation of the object.⁵⁹ An important study conducted by Lowenstein and Issacharoff showed that people who believed they had earned an object as a reward for good performance assigned it a higher value compared to those who believed they had obtained it by chance.⁶⁰ The suggested explanation for the finding was that association with the positive event of success underlying the reward added value to the object.⁶¹ If the endowment effect is known to be particularly strong with

creators' higher valuation of their works as a separate effect, entitled the "creativity effect," rather than as an enhanced endowment effect, is questionable. The endowment effect is known to be context specific, and its intensity is dependent upon multiple factors. *See generally* Korobkin, *supra* note 5, at 1235–42. There is nothing in the manner in which the underlying experiments were conducted that supports the conclusion that the creativity effect is indeed a separate effect. Such hypothesis could be tested, for example, in an experimental setting where the creators are positioned as buyers and asked to specify their WTP price. If, in such an experiment, the valuation of creator-buyers would be higher than that of non-creator buyers, then it may indicate the existence of a creativity effect that is indeed separate from the endowment effect. *Cf.* Lowenstein & Issacharoff, *supra* note 5, at 162–64 (describing an experiment that proves the separateness of the "source-dependent effect" which, when it operates in opposition to the endowment effect, may even neutralize it); *see also infra* notes 60–61 and accompanying text (describing the source-dependent effect). Any observed gap between the WTP prices of creator-buyers and the WTP prices of non-creator buyers also may be an indication of the effect of emotional attachment on creators' valuations insofar as such gap cannot be fully explained by an increased level of over-optimism on behalf of creators. *See infra* Part IV.B. While the Writers' policy recommendations are not directly dependent upon the classification of the creativity effect as a separate effect, such presentation bolsters the alleged importance of the findings, which serve as the foundation for the far-reaching arguments made in the Studies in support of weakening IP rights. For purposes of this Article, I will often use the term "endowment effect" as a general term referring to the heightened valuation of owners of IP goods, without differentiating between the "mere endowment effect" of non-creator owners and the so-called "creativity effect" of creator-owners.

56. Korobkin, *supra* note 5, at 1236. For examples, *see supra* notes 16–19 and accompanying text.

57. For a detailed discussion of such explanations, *see infra* Part IV.B.

58. *Cf.* Wendy J. Gordon, *Trespass-Copyright Parallels and the Harm-Benefit Distinction*, 122 HARV. L. REV. F. 62, 70 (2009) (stating that the endowment effect might be stronger for works of authorship than for other objects, but noting the potential counter effect of the ability to retain copies of such works for private use).

59. Nira Liberman et al., *Promotion and Prevention Choices Between Stability and Change*, 77 J. PERSONALITY & SOC. PSYCHOL. 1135, 1136 (1999).

60. Lowenstein & Issacharoff, *supra* note 5, at 165; *see also* Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 10 (describing this study as part of their review of the literature regarding the endowment effect).

61. Lowenstein & Issacharoff, *supra* note 5, at 159. Similarly, association with a negative event of failure diminishes the value of an object. In such cases, the "source

respect to earned goods (compared to goods obtained as a result of chance), then it follows logically that the endowment effect with respect to goods created by their owners would exceed the endowment effect of mere owners.⁶² Creating a good is after all a particular way of earning it, and association with the process of creation may very well increase the creator's valuation of the good. In addition, when it comes to "creative works" per se—in contrast to other goods which simply happen to be created by their owners, such as a piece of furniture assembled according to written instructions—there may be other factors that further increase the endowment effect. These factors include an enhanced emotional attachment⁶³ and the creator's feeling that her personality is embedded in the work.⁶⁴ Furthermore, the inherent uniqueness of an IP good may trigger an increased endowment effect than what would exist for an asset with readily available substitutes.⁶⁵

B. Endowment Effect with Respect to Non-Rival Goods

The Writers purport to explore the existence of the endowment effect in connection with non-rival goods.⁶⁶ However, their experiments do not involve truly non-rival goods.

A non-rival good is a good that can be used simultaneously by an unlimited number of people without interfering with one another's use.⁶⁷

dependence" effect would operate in an opposite direction from the endowment effect and may even cancel it out.

62. See Michael I. Norton et al., *The "IKEA Effect": When Labor Leads to Love* (Harv. Bus. Sch., Working Paper No. 11-091, 2011), available at <http://ssrn.com/abstract=1777100> (presenting new empirical studies that demonstrate the increased valuation of self-made products).

63. See *infra* Part IV.B.1.

64. See *infra* note 207 and accompanying text.

65. See generally Horowitz & McConnell, *supra* note 14, at 427, 436 (noting that ordinary goods have lower WTA/WTP ratios than non-ordinary goods); Korobkin, *supra* note 5, at 1238 (noting that experimenters have found that the endowment effect is more robust for goods with no close market substitutes than for goods with close substitutes).

66. See *supra* text accompanying note 52.

67. James Boyle, *The Public Domain: The Second Enclosure Movement and the Construction of the Public Domain*, 66 LAW & CONTEMP. PROB. 33, 42 (2003); Patrick Croskery, *Institutional Utilitarianism and Intellectual Property*, 68 CHI.-KENT L. REV. 631, 631–32 (1993); Nita Ghei & Francesco Parisi, *Adverse Selection and Moral Hazard in Forum Shopping: Conflicts Law as Spontaneous Order*, 25 CARDOZO L. REV. 1367, 1392 (2004); Shubha Ghosh, *Deprivatizing Copyright*, 54 CASE W. RES. L. REV. 387, 402–03 (2003). Non-rivalry is not necessarily an absolute thing. Even with respect to a good that is generally characterized as non-rival, there may still be circumstances in which certain uses would interfere with other simultaneous uses. This would be the case, for example, when a public road or park becomes too congested. See David W. Barnes, *Enforcing Property Rights: Extending Property Rights Theory to Congestible and Environmental Goods*, 10 B.C. ENVTL. AFF. L. REV. 583, 588–89 (1983) (discussing the concept of "congestible public goods," which are limited resources in which consumption by too many people simultaneously ultimately interferes with the benefit derived by each).

Non-rivalry exists with respect to a variety of goods including IP goods.⁶⁸ For instance, multiple parties may use a literary work or a musical piece simultaneously.⁶⁹ Similarly, when one person is using a specific method to manufacture a product, others may simultaneously employ the same method in their businesses.

If the endowment effect were indeed found to exist with respect to non-rival goods, this would be an interesting finding.⁷⁰ Yet, in order to properly test the endowment effect in connection with non-rival goods, the entitlement changing hands would have to be the permission to make a non-rival use of such good. For example, an experiment could be designed in which the endowment is a non-exclusive license to make a specific use of a patented invention. If a WTA/WTP gap were detected in such experiment (despite the fact that the subject positioned as the patent owner could keep using the invention and licensing it to others even after the initial licensing transaction takes place) this would indeed seem to be a manifestation of the endowment effect in connection with non-rival goods. Such a finding would be surprising because the owner in this scenario does not need to relinquish anything in order to consummate the transaction.⁷¹

However, the experiments were not designed this way. In fact, the non-rivalry of IP goods hardly played a part in the experiments. The experiments

68. The combination of non-rivalry with non-excludability, which is the difficulty of preventing others from using the good without paying, creates a “public goods problem” with respect to IP goods, i.e., a potential for sub-investment in production due to the fear of competition on behalf of free riders. This is, in fact, one of the main justifications for IP laws. See generally Daphna Lewinsohn-Zamir, *Consumer Preferences, Citizen Preferences, and the Provision of Public Goods*, 108 YALE L.J. 377 (1998) (discussing the provision of public goods); Ofer Tur-Sinai, *Cumulative Innovation in Patent Law: Making Sense of Incentives*, 50 IDEA 723, 735–37 (2010) (presenting the “public goods” nature of IP goods as a major justification for the legal regime of exclusive rights employed by IP laws). For the non-rivalry of IP goods, see Boyle, *supra* note 67, at 42; Croskery, *supra* note 67, at 632.

69. The non-rivalry characteristic only applies to the underlying intangible work and not to the particular physical embodiments of such work—e.g., a book or a CD—which can generally only be used by one person at a time.

70. It should be emphasized that by non-rival goods I do not necessarily mean public goods. In fact, the endowment effect does not seem to be relevant with respect to goods that are not only non-rival but also non-excludable and thus constitute public goods. If a good is non-excludable, it means that everyone can use it without the need for permission from anyone. Such a good, then, could not be owned in the traditional sense. No one could charge money for the good and no one would be willing to pay for it if they could get it for free.

71. As the owner is not expected to experience loss (or any other negative emotions associated with a sale) in this scenario, she would be expected to charge what she sees as the market value for the licensed use, which is presumably what would be suggested by prospective buyers. Still, there may be reasons why a WTA/WTP gap would nevertheless exist even in such a situation, including anti-competitive motives (e.g., where a potential decline is expected in the patent owner’s ability to make sales following the transaction); a decrease in the value that the patent owner derives from her own use as a result of the simultaneous use by the licensee (though, in that case, the uses are not truly non-rival); and different perspectives of the parties on the licensed use’s actual “market value,” considering that there is often no real operative market for the relevant use.

were structured so that the good changing hands was the chance to win a prize for the work, with the prize serving as a proxy for the entire economic value of the IP right attached to the work.⁷² The fact that the use of an IP good is non-rival in its nature has no relevance to such a transaction. The chance to win the prize (the good evaluated by the subjects) was either retained by the current owner or transferred to the potential buyer, but could never be enjoyed by both simultaneously. Similarly, in reality, if one person owns a copyright or a patent, others cannot own the same rights simultaneously.⁷³

While describing the non-rival nature of creative goods, the Writers focus on the fact that the “transfer of rights in a creative work . . . does not deprive the original rightsholder of possession of a copy of the work.”⁷⁴ Accordingly, they emphasize the feature of their experiment that allows the Authors (in the first experiment) and the Painters (in the second experiment) to keep their work even after selling their chance to win the prize.⁷⁵ While the ability to retain a copy of the work might reduce the endowment effect⁷⁶—something that may be worth exploring in a separate study⁷⁷—it certainly cannot be expected to cancel out the endowment effect completely.⁷⁸ The good changing hands in the experiments was not the physical copy of the work, but rather the financial prize, which represented the economic rent collectible by the owner of the exclusive legal right to exploit the work. As explained above, only one person can collect such rent, and this is true

72. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 16 (explaining that for purposes of the experiment, the value of an IP right was conceived as a probabilistic measure of the right’s likelihood of returning rents).

73. Others cannot even make certain uses of the underlying works unless the copyright or patent owner licenses those uses. For discussion of license transactions, *see infra* Part III.A.

74. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 15–16.

75. See *supra* notes 30, 41, and accompanying text. As explained therein, this was meant to help focus the Authors’ and Painters’ attention solely on the financial value of the work rather than on any personal value they might attach to it.

76. See Gordon, *supra* note 58, at 70 (noting that the ability to retain copies for private use could undermine the endowment effect); *see also supra* note 71 and accompanying text.

77. The question of whether the ability to retain a copy of the work reduces the endowment effect is tested in an experiment in which a comparison is made between the WTA of an owner who is allowed to retain a copy and the WTA of an owner who is not allowed to do so.

78. In most cases, the relative importance of the ability to retain a physical artifact embodying a creative work or technological invention and use it for personal purposes can be expected to be rather small compared to the ability to control all uses of the work or invention and extract the economic rent from its commercial exploitation. As the Writers themselves note, “[w]hereas property rights in real or personal property derive their value primarily from use and exchange, the exclusive rights granted by IP law are, in essence, monopolistic opportunities for rent seeking from other potential users and licensors, among others.” Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 17. See generally WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 17 (2003) (discussing rent seeking).

whether the owner retains a copy of the work or not. Therefore, the presence of an endowment effect in the experiments should not come as a surprise at all.⁷⁹ In fact, as the endowment at stake was the chance to win a prize, there is little substantive difference between the Studies and prior studies that have demonstrated the presence of endowment effects with respect to lottery tickets.⁸⁰ The Writers acknowledge the similarity, justifying their experimental design by noting that “IP rights function as weighted lottery tickets, with the rights associated with high-quality works more heavily weighted (and hence more valuable) than for those associated with poor-quality works.”⁸¹ The Writers fail to see that just as a lottery ticket would never be classified as a non-rival good, so the chance to win the contest they created has very little to do with non-rivalry.

As shown in this Part, the Writers both over-emphasize the uniqueness and misstate the significance of their results, and the specific finding that an endowment effect may exist with respect to non-rival goods is not supported by the underlying experiments. The Writers’ erroneous interpretation of the results serves as a flawed basis for their recommendation to weaken IP rights.

III. CRITICAL ANALYSIS: THE EXPERIMENTS ARE NOT REPRESENTATIVE OF REALITY

As this Part will show, there are significant differences between the experimental settings designed by Buccafusco and Sprigman and the reality of the markets for IP works. Thus, the results of the Studies are not indicative of actual IP markets.

79. Admittedly, the endowment effect is expected to be smaller when an individual evaluates an entitlement for its exchange value rather than its use value. *See, e.g.*, Korobkin, *supra* note 5, at 1239. However, the endowment effect may still exist, at least where exchange rates are uncertain, as in the current case (both in the experiment and in reality). *See, e.g.*, van Dijk & van Knippenberg, *supra* note 6, at 486; van Dijk & van Knippenberg, *supra* note 8, at 521.

80. Bar-Hillel & Neter, *supra* note 17; Knetsch & Sinden, *supra* note 17. The main difference between these scenarios is that unlike a lottery ticket, which has no intrinsic value following the distribution of the prize, creative works presumably retain an intrinsic value for their owners. In addition, some sellers in the experiments—particularly in the second set—may have even envisioned a possibility of further commercializing the work following the experiment. The sellers were not explicitly forbidden to do so by the experimenters (who must have not contemplated such further commercialization plans by the owners, as the prize was designed to serve as a proxy for the entire economic value represented by the work). *See* Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 16. Nevertheless, as explained above, this feature of the experiment could not be expected to cancel the endowment effect with respect to the prize itself, even if it could potentially decrease it. *See supra* notes 76–79 and accompanying text.

81. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 16.

A. Assignments vs. Licenses

There is a gap between the narrow scope of the Writers' experiments and the broad policy recommendations they make in the normative part of the Studies. The monetary prize offered to the participants in the Studies was designed to serve as a proxy for the entire economic value of the IP right attached to the work.⁸² Thus, the experiments are directly relevant to only a specific type of IP transaction—a complete assignment of an IP right. In reality, an IP owner has the option to engage in one or a few of a variety of transactions with respect to her right. She may choose, for example, to assign only a part of her right.⁸³ The most common form of dealing in IP rights is licensing.⁸⁴ While an assignment is a complete transfer of ownership in which the assignor relinquishes all interest in the IP right,⁸⁵ in a license transaction, the licensor retains a proprietary interest in the IP right and the licensee is merely granted permission to carry out specified activities with respect to the work.⁸⁶

The experimental setting was modeled after an assignment transaction.⁸⁷ If the conclusions were stated accordingly, this would not be problematic. However, this is not the case. For example, when Buccafusco and Sprigman recommend revisiting IP law's preference for strong property rules,⁸⁸ their discussion is based on the hypothesis that the WTA/WTP gap observed in their Studies characterizes a range of IP transactions, including license transactions.⁸⁹ It seems that the Writers either fail to notice that their experimental design is very limited in scope or make an implicit assumption

82. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 16. Said monetary prize was designed so that it represents the entire probabilistic value of the rents that could be obtained from holding the right to the work. See, e.g., Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 17–18; see also *supra* text accompanying note 79.

83. See, e.g., *Waterman v. Mackenzie*, 138 U.S. 252, 255–56 (1891) (explaining that a patentee may assign the whole patent, an undivided part or share of the patent, or the exclusive right under the patent within a specified geographical area); LIONEL BENTLY & BRAD SHERMAN, *INTELLECTUAL PROPERTY LAW* 262 (3rd ed. 2009) (noting that copyright law allows partial assignments by reference to “times, territories and classes of conduct”).

84. See, e.g., PAUL TORREMANS, *HOLYOAK AND TORREMANS INTELLECTUAL PROPERTY LAW* 105 (6th ed. 2010) (noting with respect to patents that “[t]he most likely form of dealing by the patentee is that he or she will seek to license out the patent by a formal agreement that allows another party to work the patent without fear of an infringement action”); BENTLY & SHERMAN, *supra* note 83, at 264 (noting with respect to copyrights that “[t]he powers conferred on the copyright owner are most commonly employed by the copyright owner giving licenses to particular individuals permitting them to carry out specified activities”).

85. See, e.g., BENTLY & SHERMAN, *supra* note 83, at 262.

86. See, e.g., *id.* at 264.

87. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 16.

88. See *infra* Part V.A.

89. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 34.

that what they observe with respect to assignment transactions must be true with respect to license transactions as well.⁹⁰

Either way, the experiment is not representative of reality. Even if an endowment effect were generally present in the context of assignment transactions, this would not necessarily be the case with respect to license transactions.⁹¹ Assignment entails a complete separation of the assignor from her right, likely triggering the endowment effect according to all the psychological explanations for its existence,⁹² including the loss aversion account.⁹³ In a license transaction, however, the owner does not separate from the right, so she does not necessarily experience the same emotional responses that account for the endowment effect. In fact, in contrast to the experimental setting, in the case of a license transaction, the non-rivalry of IP goods matters. An IP owner who enters a license transaction with another person merely grants permission to this other person to use the IP in a specific manner, and unless it is an exclusive license, she can still make the same use of the work herself and even continue licensing it to others. Even in the case of an exclusive license, often there would be multiple uses of the work not covered by the specific license and thus still available for the owner and others licensed by her. This would likely make the owner in the licensing context less affected by fear of regret and other potential disutilities of the transaction.⁹⁴

Moreover, while the owner of an IP right may often lack motivation to assign her right,⁹⁵ most IP owners are motivated to license their work, which may make them more prone to settle for lower prices.⁹⁶ An IP owner who

90. See *id.* at 4 (“IP licensing markets may be substantially less efficient than previously believed.”); *id.* at 42–43 (mentioning, as an example of a case where the endowment effect may block an efficient transfer, a copyright owner of a musical work who demands an irrational amount of money to license her song to another user who wants to use part of the song in a new work).

91. Note that the argument made herein is not that the endowment effect can never be present in license transactions, but rather that the Studies were not designed to explore the magnitude of the effect in such transactions. In order to test the endowment effect in this setting, an experiment could be held in which the entitlement changing hands is, for example, a non-exclusive license to publicly perform a musical work. See also *supra* text accompanying note 71.

92. For a detailed discussion of such explanations, see *infra* Part IV.B.

93. See *infra* notes 154–174 and accompanying text.

94. See *infra* note 164 (with respect to other potential disutilities of the transaction); *infra* notes 165–174 and accompanying text (with respect to fear of regret).

95. An incentive to assign the right may exist when the original owner believes that another person or entity is better equipped to handle commercial exploitation of the work. For instance, songwriters typically assign their copyright to publishing houses, which manage all rights and royalty distribution. See, e.g., Derek E. Bambauer, *Faulty Math: The Economic of Legalizing the Grey Album*, 59 ALA. L. REV. 345, 390 (2008); Joshua Keesan, Note, *Let it Be? The Challenges of Using Old Definitions for Online Music Practices*, 23 BERKELEY TECH. L.J. 353, 354 (2008).

96. See generally MARTIN J. ADELMAN ET AL., CASES AND MATERIALS ON PATENT LAW 1232 (1998) (noting that “[i]ndividuals license patents for a variety of reasons, including the

does not assign her right may still be able to collect all the economic rents attributable to the work by commercializing it on her own through self-manufacturing and direct sales to end users or through licensing transactions. Similarly, in the Writers' experiments, an Owner who did not sell her chance to win the prize could still win the prize itself. In contrast, however, an IP owner who does not grant licenses to use her work may lose potential income.⁹⁷ Not all IP owners have the financial and other resources necessary to manufacture their product or make copies of their work in a large enough scale to meet the market's demand entirely on their own. Those owners who are not capable of doing so in order to collect the available rents must grant licenses to others permitting them to make copies of the work and distribute them to end users.⁹⁸ Furthermore, in some cases, the IP owner does not have the expertise required to effectively make use of the work in the manner contemplated by a specific licensee. For example, the author of a book who holds its copyright may be asked to grant a license to make a movie based on the book. As the creative skills required to make the derivative work are entirely different than those required to make the original work, the movie might never be made if the copyright owner does not license the right to make the movie to another, thus foregoing a significant source of income.⁹⁹ Similarly, an owner of a patent for a basic invention may lack the ability to develop a follow-on invention, so if she does not grant a license to develop such an invention, it may never be developed.¹⁰⁰ For instance, the expertise needed to develop a new type of fiber optic technology may be different than that needed to develop a new application of such technology in a specific field, such as the telecommunications field.¹⁰¹ If a prospective licensee has a particularly innovative idea for such application and the skills to develop it, then even if the licensing fees she offers are lower than what was previously envisioned by the IP owner, the owner may nevertheless go forward with the transaction because the alternative may be

inability to exploit fully the patented technology, a need to obtain access to another's patented technology via cross-licensing, or simply a desire for additional revenues").

97. *But see* Gordon, *supra* note 58, at 69–73 (arguing that because owners are likely to be more vigilant in avoiding harms than in pursuing benefits, and because intangibles are more open to harmless use by strangers due to their non-rival nature, the owners of intangibles may not be as motivated to garner license fees from new users compared to the owners of tangible property). Nevertheless, according to Gordon, over-confidence bias could counteract the focus on potential harm. *See id.* at 72; *infra* Part IV.B.2 (discussing over-optimism of creators).

98. *See, e.g.,* BENTLY & SHERMAN, *supra* note 83, at 261.

99. *Cf.* ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 427 (4th ed. 2006) (commenting that "[j]ust because someone is a successful writer . . . does not mean that he will be particularly successful at manufacturing and selling plush toys").

100. As the courts have constructed the experimental use exception under U.S. law very narrowly, such a license would be needed in most cases in order to avoid an infringement. *See Tur-Sinai, supra* note 68, at 770–73.

101. *Id.* at 735.

to completely give up the chance to make the profit associated with this specific type of project. IP owners, therefore, are normally expected to be highly motivated to license their work.¹⁰²

On top of the economic incentives to enter into license transactions, many creators may also be motivated by the desire to get published and acquire a reputation, which may encourage them to compromise on the price offered for uses of their work. Altogether, such strong motivations to license may lead IP owners to show more flexibility and willingness to settle for lower prices when negotiating deals with potential licensees. This intuitive understanding is supported by a study conducted by Mandel.¹⁰³ In the study, Mandel explored the relationship between “transaction demand,” i.e., the motivation to complete a transaction, and the endowment effect. His study confirmed that owners would be more inclined to sell at lower prices as the transaction demand increased.¹⁰⁴

In addition, actual licensees would likely demonstrate a higher transaction demand than the random “buyers” in the Writers’ experiments given their position as consumers in search of a specific product. A potential author who needs to use a copyrighted work for a creative endeavor or an inventor who needs to use a patented invention as a research tool to develop a follow-on invention is likely willing to pay a higher price for a license than a random subject who is merely gambling on a chance to win a financial prize.¹⁰⁵

Thus, the endowment effect in itself is not likely to constitute a major obstacle in the context of license transactions. Though there are contexts in which parties to license transactions must overcome significant hurdles in order to come to an agreement,¹⁰⁶ they will often be able to overcome valuation anomalies.

102. An exceptional case would be an IP owner who prefers to remain the sole user of the relevant work. For example, the owner of a patent for a technological process that decreases the production costs of a certain product she manufactures may have no desire to license such technology to others, as she might prefer to keep using the process exclusively in order to maintain a significant competitive advantage. Another case where licenses do not play a significant role is certain works of fine art that only exist in a single copy. As the non-rivalry characteristic does not apply to such works, licensing is largely irrelevant.

103. Mandel, *supra* note 11.

104. *Id.* at 737–38. Similarly, as transaction demand increases, potential buyers would be more inclined to pay higher prices. *Id.*; cf. Liberman et al., *supra* note 59 (showing that a “promotion focus,” in contrast to a “prevention focus,” lowers the endowment effect).

105. See *supra* note 104 and accompanying text (discussing the connection between buyers’ transaction demand and their willingness to pay higher prices).

106. See, e.g., Tur-Sinai, *supra* note 68, at 750–51 (describing the particularly high transaction costs characterizing licensing transactions between cumulative inventors).

*B. Other Factors that Are Likely to Mitigate
the Endowment Effect in Reality*

There are additional factors, unexplored in the Studies, that are likely to mitigate the endowment effect in any IP transaction.

In light of high “transaction demand,” a potential “buyer”—an assignee or licensee of an IP good, and particularly the person who might best exploit such good, who should be the focus of our inquiry according to the Writers¹⁰⁷—will often be willing to pay much more than the random subjects who participated in the Studies. Such a “buyer” presumably knows the market well and is in a position to exploit the asset in a profitable manner. Often the “buyer” would only contemplate the transaction if she has access to superior manufacturing abilities or particularly efficient marketing channels that make her confident in her ability to benefit from the transaction.

Another important difference between the experimental setting and the reality of IP markets is the ability to bargain. In the experiments, no bargaining between the subjects was allowed. Each subject indicated her price in an isolated manner and was not even given a chance to reevaluate it in response to the price specified by the other party. In reality, bargaining is in many cases an option, and prices are often determined during the course of negotiation. Throughout the bargaining phase, the parties often receive input from the relevant markets, and every round of negotiation serves as a factor in pricing decisions in the next round. This dynamic bargaining process often ends with the parties agreeing on a price between their initial offers.¹⁰⁸

Furthermore, while the experiments situated each seller against a single buyer, in reality negotiations are often conducted in the context of potential or real competition from other parties.¹⁰⁹ This reality may also increase the number of instances where, despite an initial WTA/WTP gap, the parties would nevertheless manage to close a deal.¹¹⁰

To summarize, the results of the experiments, isolated and non-representative of the reality of IP markets, do not suggest a market failure

107. See *infra* Part IV.A.

108. See also *infra* notes 237–238 and accompanying text.

109. Such competition often exists even on the supply side despite the inherent uniqueness of creative goods. A person who wishes to use a copyrighted work for a certain purpose—i.e., incorporate a certain graphic image into her website—may often be able to settle for a close substitute. Even patents do not necessarily confer market power upon their owners. See, e.g., Kenneth W. Dam, *The Economic Underpinnings of Patent Law*, 23 J. LEGAL STUD. 247, 249 (1994); Edmund W. Kitch, *Patents: Monopolies or Property Rights?*, 8 RES. L. & ECON. 31 (1986); Edmund W. Kitch, *Taking Stock: The Law and Economics of Intellectual Property Rights: Elementary and Persistent Errors in the Economic Analysis of Intellectual Property*, 53 VAND. L. REV. 1727, 1729–38 (2000); Jordan P. Karp, Note, *Experimental Use as Patent Infringement: The Impropriety of a Broad Exception*, 100 YALE L.J. 2169, 2185 (1991).

110. See generally Arlen, *supra* note 11, at 1769, 1777 (noting that biases may be muted or altered by market forces).

that would prevent transfers that would normally occur but for the endowment effect.

IV. CRITICAL ANALYSIS: NO JUSTIFICATION FOR INTERVENTION

Even assuming that the Writers are correct and that a WTA/WTP gap extends beyond their limited experimental setting to markets for IP goods, this Part argues that this finding would not constitute sufficient grounds for debiasing through legal intervention. First, the supposed need to ensure that a good reaches the hands of the party who values it the most, a foundational notion underlying Buccafusco and Sprigman's call for debiasing, is not really applicable in the world of intellectual property. There are, in fact, other important factors relevant to allocation decisions in intellectual property that are largely overlooked in the Studies. Second, an examination of the reasons for the endowment effect in IP transactions, to the extent it exists, shows that the high valuations of owners are not simply mistakes but may rather be based on legitimate reasons that do not warrant legal intervention.

A. What Constitutes an Efficient Allocation in IP Law?

Buccafusco and Sprigman's recommendations are based on the policy goal of facilitating the transfer of IP goods to those who might best exploit them.¹¹¹ Their basic argument is that since there are market failures, as illustrated by their experiments, such IP transfers only take place in a sub-optimal percentage of cases and, therefore, legal intervention is warranted.

An argument of this type is commonly made in law and economics literature. It is a general presumption of economics that a good is allocated efficiently if it is possessed by the claimant who values it the most and can extract the greatest utility from it.¹¹² The Coase Theorem posits that in the

111. See, e.g., Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 34 (expressing concern that the endowment effect would impede efficient transacting and thus perpetuate initial inefficient property distributions); *id.* at 46 ("IP rights are rarely given initially to the party best able to exploit them."); Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 17 (noting that the assumptions underlying the Coase Theorem would not hold true if endowment effects were found to exist in the markets for creative goods and expressing concern that "instead of the right reliably ending up in the hands of the party that will use it most efficiently, it is much more likely that the party that is initially assigned the right will retain it").

112. See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 11 (4th ed. 1992) (noting that "[w]hen resources are used where their value is highest, we may say that they are being employed efficiently"); see also Korobkin, *supra* note 8, at 663 (noting that when a legal rule allocates resources to the party who values them most, economists say that the rule promotes efficiency); Michael I. Swygert & Katherine Earle Yanes, *A Primer on the Coase Theorem: Making Law in a World of Zero Transaction Costs*, 11 DEPAUL BUS. L.J. 1, 11 (explaining that market exchanges promote efficiency because they "enable resources to move into the hands of those who value them most" and noting that such users "who value resources at higher levels do so because they can extract a greater productivity from these resources than can the former owners").

absence of transaction costs, it makes no difference from an efficiency perspective who initially receives a legal entitlement because, regardless of the initial allocation, a series of exchanges will take place until the party with the highest value for the entitlement owns it.¹¹³ If, however, high transaction costs prevent the “highest value user” from purchasing an entitlement in the free market, policymakers must initially allocate the entitlement to such a party.¹¹⁴ The endowment effect can have an effect similar to that of transaction costs because in its presence entitlements will not change hands in the free market as often as the Coase Theorem predicts.¹¹⁵ Thus, the common economic argument asserts that the presence of an endowment effect in a specific setting justifies legal intervention to ensure efficient allocation of the entitlement. This can be accomplished either by initially allocating the entitlement to the party who values it the most or by encouraging the efficient transfers of the entitlement that would normally occur in the free market but for the endowment effect. The concern that the endowment effect impedes transfers of IP goods to those who value them the most forms the foundation upon which Buccafusco and Sprigman base their recommendations.¹¹⁶

Yet, in the context of IP law, the general economic presumption that an entitlement is allocated efficiently if it is possessed by the claimant who values it the most is not really applicable. This consideration by itself is generally not even mentioned as one of the relevant factors governing the economic analysis of IP law.¹¹⁷ Considering the non-rival nature of IP goods, this is not surprising.¹¹⁸ A tangible asset can only be held by one person at a time, and thus, from an efficiency perspective, that person must be the one who can derive the most utility out of holding such a scarce resource.¹¹⁹ In contrast, more than one person can generally use an IP asset

113. Coase, *supra* note 28, at 7–8; *see also* Korobkin, *supra* note 8, at 664 (summarizing the Coase Theorem).

114. Korobkin, *supra* note 8, at 664.

115. Korobkin, *supra* note 5, at 1229; Korobkin, *supra* note 8, at 664 (noting that the endowment effect undermines Coase’s invariance hypothesis).

116. *See supra* note 111.

117. For elaborate discussions of the various factors governing the economic analysis of intellectual property law that do not mention the “highest value user” rationale, *see, e.g.*, Dam, *supra* note 109 (discussing the economic principles underlying the patent system); Wendy J. Gordon, *Intellectual Property*, in *THE OXFORD HANDBOOK OF LEGAL STUDIES* 617, 638–43 (Peter Cane & Mark Tushnet eds., 2003), *available at* <http://www.ssrn.com/abstract=413001> (surveying the central economic considerations dominating the analysis of intellectual property); A. Samuel Oddi, *Un-Unified Theory of Patents—The Not-Quite-Holy Grail*, 71 NOTRE DAME L. REV. 267, 269–70 (1996) (outlining the various economic theories developed over the years in an attempt to describe the patent system).

118. *See supra* note 68 and accompanying text (discussing the non-rival nature of IP goods).

119. *Cf.* Swygert & Yanes, *supra* note 112, at 8 (using the term “scarce resource” in a relevant context, while noting that “there is general agreement among law and economics proponents that society’s combined total well-being can be enhanced by courts, legislatures,

simultaneously, making the “highest value user” consideration not applicable per se to the IP arena.¹²⁰

Moreover, even if an IP asset is in the hands of a party who is not the “highest value user,” the asset can still be simultaneously used by others—acting under a license from the owner or under a legal doctrine permitting the relevant use without the owner’s consent—to generate utility. Furthermore, as noted by Professor Merges, “[a]ssigning an entitlement to the most efficient holder is generally not possible in the complex field of intellectual property, where creative works have many uses requiring multiple transactions.”¹²¹ At the end of the day, when it comes to intellectual property, ensuring broad access to the work is much more important than whether the work is held by a party who may herself extract the highest utility.¹²²

Access is a key factor in the economic analysis of intellectual property.¹²³ From the “access” perspective, taken in isolation, the most efficient allocation of an IP good is the one where access to the good is ensured to all users who value it at more than the marginal production cost,¹²⁴ while any

and administrative agencies knowingly maximizing efficient allocations of scarce resources . . .”).

120. Cf. Glynn S. Lunney, Jr., *Trademark Monopolies*, 48 EMORY L.J. 367, 463 (1999) (mentioning the “highest valued use” rationale as originating in connection with tangible property, “where it is usually the case that one use of the good physically precludes another”); Matthew Sag, *Copyright and Copy-Reliant Technology*, 103 NW. U.L. REV. 1607, 1614 (2009) (arguing that “market allocation of scarce resources to their highest valued use is usually welfare enhancing, but for nonrivalrous goods, the exclusion of low-value users produces a deadweight loss because their consumption is not at the expense of another who values the good more”). See generally LANDES & POSNER, *supra* note 78, at 20 (mentioning the point that “intellectual property rights create scarcity whereas property rights in physical goods manage scarcity”). Admittedly, certain uses of an intangible asset may not be perfectly non-rival. See *infra* note 124. For example, there is generally no economic sense in allocating a right to create a movie based on a specific novel to more than one party. In such cases, the need to allocate the right to make such use to the party who values it the most presumably still holds value. However, when it comes to the entire ownership interest in the underlying work (e.g., the novel), which the monetary prize offered to the participants in the Studies purports to represent, the “highest value user” consideration is largely irrelevant, as explained in the text.

121. Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293, 1307 (1996).

122. Surely, such a “highest value user” cannot necessarily be expected to provide particularly broad access to the work. Among other things, she may herself suffer from an endowment effect once she becomes the owner of the work.

123. See, e.g., LANDES & POSNER, *supra* note 78, at 11 (describing the tendency among economic analysts of intellectual property to focus on the tradeoff between incentives and access); Gordon, *supra* note 117, at 619 (noting that one of the standard considerations underlying the study of IP is the need to provide access to members of the public); Robert A. Kreiss, *Accessibility and Commercialization in Copyright Theory*, 43 UCLA L. REV. 1, 10 (1995) (discussing the central role played by accessibility in copyright theory).

124. This statement is, of course, an oversimplification, as it assumes “perfect” non-rivalry of IP assets while, in fact, adding users can sometimes impose costs on current users of an IP good. See generally LANDES & POSNER, *supra* note 78, at 13 (discussing the potential existence of congestion externalities in connection with intellectual property). See also *supra* note 67.

other result—where the social value of the intellectual property product is not fully realized—would be considered wasteful.¹²⁵ This perspective, however, does not take into account the need to provide adequate incentives for private investment in creating intellectual property goods in the first place,¹²⁶ which is, in fact, the primary economic justification for IP protection.¹²⁷

Over the years, various commentators have criticized this justification, arguing that state intervention is not necessary to secure incentives to invent and create.¹²⁸ Despite this criticism, the incentive justification still dominates IP theory and policy. There is naturally a tradeoff between the need to incentivize innovation and expressive creativity *ex ante* and the need to ensure access to the products resulted from such activities *ex post*.¹²⁹

125. Cf. Benjamin G. Damstedt, *Limiting Locke: A Natural Law Justification for the Fair Use Doctrine*, 112 YALE L.J. 1179 (2003) (maintaining that a refusal to sell units of an intangible violates the Lockean “no waste” prohibition); Ofer M. Tur-Sinai, *Beyond Incentives: Expanding the Theoretical Framework for Patent Law Analysis*, AKRON L. REV. (forthcoming), available at <http://ssrn.com/abstract=1697254> (arguing, in connection with Locke’s labor theory, that “waste seemingly occurs every time a certain potential use of an intellectual product that could have brought benefit to the user does not materialize”).

126. In connection with patent law, scholars have pointed to other incentives, alongside the basic incentive to invent, that the legal regime of exclusive rights is meant to provide. One of them is the incentive to disclose the information underlying a new invention. See generally Rebecca S. Eisenberg, *Patents and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017, 1028–29 (1989); Gordon, *supra* note 117, at 632; Julie S. Turner, *The Nonmanufacturing Patent Owner: Toward a Theory of Efficient Infringement*, 86 CALIF. L. REV. 179, 189–90 (1998). Another one is the incentive to invest in commercialization activities required to turn nascent inventions into new goods and services. See generally F. Scott Kieff, *Property Rights and Property Rules for Commercializing Inventions*, 85 MINN. L. REV. 697 (2001).

127. See, e.g., LANDES & POSNER, *supra* note 78, at 11 (describing the fear that without legal protection against copying, the incentive to create intellectual property will be undermined); Brett Frischmann, *Spillovers Theory and Its Conceptual Boundaries*, 51 WM. & MARY L. REV. 801, 803 (2009) (describing the basic economic justification for IP rights as providing incentives); Tur-Sinai, *supra* note 68, at 729 (presenting the incentive to invent theory as the most traditional economic justification for the patent system). The incentive-based justification for patent law and copyright law has roots in the U.S. Constitution, which empowers Congress to “promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their respective Writings and Discoveries.” U.S. CONST., art. I, § 8, cl. 8.

128. See generally Tur-Sinai, *supra* note 68, at 737–39 (summarizing this line of criticism with respect to patent law); Rebecca Tushnet, *Economies of Desire: Fair Use and Marketplace Assumptions*, 51 WM. & MARY L. REV. 513 (2009) (exploring the ways in which the desire to create can be free from the need for economic incentive); Diane Leenheer Zimmerman, *Copyrights as Incentives: Did We Just Imagine That?*, 12 THEORETICAL INQUIRIES IN LAW 29 (2011) (challenging the traditional incentive justification for copyright law, while drawing on behavioral studies that suggest that intrinsic factors are much more important determinants of participation in creative work than such extrinsic ones as monetary reward).

129. See, e.g., Gideon Parchomovsky & Peter Siegelman, *Towards an Integrated Theory of Intellectual Property*, 88 VA. L. REV. 1455, 1458–59 (2002) (discussing the tradeoff between *ex ante* and *ex post* perspectives underlying patent and copyright law). Trademark

Broadening the exclusive rights granted to inventors and authors under IP law increases the incentive to produce IP goods but also limits access to such goods because it allows IP owners to charge prices in excess of the marginal cost of production.¹³⁰ Structuring IP law in a manner that appropriately strikes a balance between the benefits of increased incentives and the costs of decreased access has been one of the main challenges faced by policymakers in the IP arena, with various doctrines in IP law designed to achieve an equilibrium between these competing considerations.¹³¹

Yet the thesis embodied in the Studies, centered on the need to ensure transfers of the goods to those who value them the most, largely ignores these fundamental dynamic efficiency considerations.¹³² As this need is not a dominant consideration in the context of IP law, the presence of endowment effects provides insufficient justification for legal intervention in the markets for IP goods, even if it were true that such effects prevent certain transfers of IP rights to “highest value users.”

Intervention, in fact, may work against the policy goals that are central to IP law, most notably the need to provide incentives to create IP goods.¹³³ Thus, for example, if we were to follow the Writers’ recommendations to

protection, by contrast, is not usually thought to embody a comparable tradeoff. *See id.* at 1459.

130. *See, e.g.,* LANDES & POSNER, *supra* note 78, at 11, 20–21 (describing the “access versus incentives” tradeoff); WILLIAM D. NORDHAUS, *INVENTION, GROWTH AND WELFARE: A THEORETICAL TREATMENT OF TECHNOLOGICAL CHANGE* (1969) (discussing the basic tradeoff between the desire to provide an incentive to invent and the social loss resulting from the monopolistic pricing by the patent owner, in an attempt to figure out optimal patent length); Gaia Bernstein, *In the Shadow of Innovation*, 31 CARDOZO L. REV. 2257, 2295 (2010) (noting that patents are traditionally “viewed as a tradeoff between the benefit of encouraging innovation and the cost of limiting access to the resulting innovation”); Oskar Liivak, *Rethinking the Concept of Exclusion in Patent Law*, 98 GEO. L.J. 1643, 1662 (2010) (noting that the access versus incentives tradeoff is at the heart of most policy discussions about intellectual property); Glynn S. Lunney, Jr., *Reexamining Copyright’s Incentives-Access Paradigm*, 49 VAND. L. REV. 483, 485 (1996) (describing the dominance of the “examination of incentives and access” in copyright discourse over the past three centuries).

131. Such doctrines include, for example: (1) the fair use doctrine in copyright law; (2) compulsory licensing provisions in patent and copyright law; (3) the limited duration of patents and copyrights; (4) the reverse doctrine of equivalents in patent law; and (5) the doctrines of patent misuse and copyright misuse.

132. The only instance where the Writers address the potential impact of their proposals on incentives to create is in connection with their suggestion to shift from property rules to liability rules. *See* Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 35; *infra* notes 271–276 and accompanying text (discussing critically the specific argument made by the Writers in this context); *see also* Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 45–46 (commenting, in the context of their second study, on the possibility that removing the creativity effect might have an adverse effect on incentives).

133. Weakening IP rights may not only undermine the economic goals of the IP system, but may also operate against other values that, according to certain non-utilitarian theories, the IP system is meant to promote. *See generally* Tur-Sinai, *supra* note 125 (discussing the applicability of the labor theory and the personality theory to patent law); *infra* notes 244–246 and accompanying text.

increase the use of liability rules in IP law and broaden doctrines that allow for free, non-consented use of IP goods—such as the fair use doctrine in copyright law—we may end up decreasing the incentive to create IP goods to a sub-optimal level.¹³⁴ To be sure, the current IP regime does not necessarily achieve an optimal balance among all relevant considerations,¹³⁵ and there is certainly room for changes in the way that IP law is designed. Yet effective recommendations for such changes cannot be made without fully assessing the recommendations' potential negative effect on incentives and comparing such effect to the proclaimed benefits of the suggested change.¹³⁶

B. *The Reasons for the Endowment Effect*

The Writers' policy recommendations reflect their opinion that the endowment effect¹³⁷ recognized in their experiments is a major obstacle to efficient bargaining that needs to be removed in order to allow IP transactions to occur at a level that is not "significantly suboptimal," i.e., lower than the level of mutually beneficial transactions that would exist in the absence of the endowment effect.¹³⁸

In practice, however, the endowment effect does not represent a mere flaw or impediment to bargaining.¹³⁹ The endowment effect does not always reflect "irrational" behavior¹⁴⁰ and it is not an unambiguous mistake that requires correction.¹⁴¹ In many circumstances, there are legitimate reasons for the WTA/WTP gap.¹⁴² As a result, there is often no obvious answer to the

134. See *infra* Part V.A. (concerning liability rules), Part V.C. (concerning the fair use doctrine).

135. Cf. Eisenberg, *supra* note 126, at 1031–32 (noting the difficulty in determining whether the current level of incentives supplied by the patent system is too high or too low).

136. See Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 44 (acknowledging the need to base decisions about the desirability of specific proposals on empirical assessments of the proposals' respective costs and benefits).

137. As noted before, my use of the term "endowment effect" includes the so-called separate "creativity effect" recognized by Buccafusco & Sprigman, i.e., the enhanced endowment effect expressed by the Painters in their second experimental setting. See *supra* note 55.

138. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 47; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 4. For the Writers' definition of "suboptimal," see *supra* note 46.

139. Jeffrey J. Rachlinski & Forest Jourden, *Remedies and the Psychology of Ownership*, 51 VAND. L. REV. 1541, 1576 (1998).

140. Korobkin, *supra* note 5, at 1280. See also Gordon, *supra* note 58, at 69 (noting that in many circumstances the endowment effect is both rational and legitimate).

141. See Jolls & Sunstein, *supra* note 7, at 219–20 (making such argument, in general, with respect to departures from expected utility theory, as distinguished from judgment errors).

142. *Id.* at 220; see also Korobkin, *supra* note 5, at 1280 (noting that a "preference for what one has over what one does not have, or for what one is accustomed to compared to the unknown, is no more troublesome than a preference for chocolate ice cream over vanilla," and arguing that "[t]his is true regardless of what causes the endowment effect"); Rachlinski & Jourden, *supra* note 139, at 1576 ("[The] endowment effect is an integral part of how people feel about their possessions and rights."). The Writers note as well that "only when we

question of which claimant values an entitlement the most.¹⁴³ In fact, “[b]oth WTA and WTP constitute real and true measures of people’s valuation of entitlements. Neither measure is invariably superior to the other”¹⁴⁴ In order to figure out whether WTA or WTP more appropriately measures value in a particular instance, there is a need to first determine what accounts for the gap.¹⁴⁵ Buccafusco and Sprigman perform such an examination,¹⁴⁶ but I disagree with their conclusions, as I explain below.

Over the years, several theories have been offered for why the endowment effect exists. None of these theories can explain the endowment effect completely, and the precise psychological mechanisms underlying the effect are not fully understood.¹⁴⁷ It is important to note that some scholars have questioned whether the endowment effect actually exists or whether it is merely an artifact of the experimental conditions under which it has been found.¹⁴⁸ For example, it has been suggested that the language used in an experiment might cause subjects to see the endowed good as a gift from the experimenter or believe that the “correct” choice is to keep the endowed

are confident that the [valuation] asymmetries result from cognitive biases and not just idiosyncratic preferences should we consider attempts at debiasing.” Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 31.

143. Korobkin, *supra* note 8, at 671. *See also* Lewinsohn-Zamir, *supra* note 5, at 251 (arguing that the endowment effect “may actually cast doubt on the very idea that there exists some person who values an entitlement most”); Rachlinski & Jourden, *supra* note 139, at 1555 (suggesting that it is not clear whether the socially optimal owner of a commodity is the person who would pay the most for it or the one who would demand the most to part with it).

144. Lewinsohn-Zamir, *supra* note 5, at 250–51.

145. Korobkin, *supra* note 8, at 683. *See also* Jolls & Sunstein, *supra* note 7, at 220 (noting that in some contexts, a decision maker may determine that either WTA or WTP is the correct measure of value).

146. *See* Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 41–43; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 25–33.

147. *See* Owen D. Jones & Sarah F. Brosnan, *Law, Biology, and Property: A New Theory of the Endowment Effect*, 49 WM. & MARY L. REV. 1935, 1936 (2008) (noting that the endowment effect still puzzles economists and that “there are at present no satisfying explanations for why it manifests when and how it does”); Cass R. Sunstein, *Legal Interference with Private Preferences*, 53 U. CHI. L. REV. 1129, 1151 (1986) (stating that “[t]he phenomenon of endowment effects has complex roots”); *see also* Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 11; Korobkin, *supra* note 5, at 1242; *cf.* Arlen, *supra* note 11, at 1768 (discussing behavioral analysis of law, in general, and noting that it “cannot necessarily provide an alternative framework [to classical economic theory] for developing normative policy prescriptions because it does not yet have a coherent, tractable model of human behavior which can serve as a basis for such recommendations”).

148. Korobkin, *supra* note 5, at 1242; *see also* Jones & Brosnan, *supra* note 147, at 1944–45 (noting the possibility that the effect is a by-product of insufficiently controlled experimental designs); Charles R. Plott & Kathryn Zeiler, *Exchange Asymmetries Incorrectly Interpreted as Evidence of Endowment Effect Theory and Prospect Theory?*, 97 AM. ECON. REV. 1449, 1449 (2007) (arguing that the asymmetries in exchange behavior observed in previous studies are not a result of loss aversion but are rather an artifact of the experimental procedures employed).

good.¹⁴⁹ While this may be true, I will assume for the sake of this critique that the effects recognized in the Studies are indicative of true differences in subjects' valuations rather than a by-product of the experimental design.

One suggested explanation for the endowment effect is that the gap between WTA and WTP prices is simply a result of "wealth effects." "[E]ntitlements are stores of wealth," and the preferences of wealthier individuals may be slightly different than those of poorer individuals.¹⁵⁰ A related explanation suggests that WTP prices may be constrained by lack of resources and thus do not adequately reflect the monetary worth of entitlements to relatively poor people.¹⁵¹ These explanations, however, can only account for the WTA/WTP gap in a narrow set of circumstances.¹⁵² In the context of the Writers' experiments, in light of the relatively inexpensive value of the entitlements at stake, the wealth effect does not seem to be relevant.

Beyond these preliminary explanations, the main theories that have been suggested to account for the endowment effect are loss aversion and the ownership/attachment account.¹⁵³

Loss Aversion

The endowment effect has been routinely explained as a manifestation of loss aversion, an element of Kahneman and Tverski's Prospect Theory,¹⁵⁴ according to which "losses are weighted substantially more than objectively commensurate gains in the evaluation of prospects and trades."¹⁵⁵ In other

149. Plott & Zeiler, *supra* note 148, at 1455. *See also* Korobkin, *supra* note 5, at 1247 (mentioning the possibility that the "subjects believe the experimental condition to which they are assigned signals information about the quality of the entitlement at issue").

150. Korobkin, *supra* note 5, at 1247; *see also* Cotter, *supra* note 53, at 59 (explaining the role that the diminishing marginal utility of income plays in this context); Sunstein, *supra* note 147, at 1151.

151. *See* Korobkin, *supra* note 5, at 1247; Korobkin, *supra* note 8, at 684. Yet, in many cases, a poor person would also have a lower WTA and not just a lower WTP. *See* Korobkin, *supra* note 5, at 1249.

152. Korobkin, *supra* note 5, at 1248.

153. There are some other explanations that have been suggested. For example, a recent article, drawing on evolutionary biology, suggests that the endowment effect is an evolved behavioral predisposition that may seem irrational under modern conditions but may have been useful under long-stable ancestral conditions. *See* Jones & Brosnan, *supra* note 147, at 1959–60.

154. Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263 (1979). Prospect Theory states, in general, that value is a reference-dependent function that decelerates in the domain of losses more quickly than it accelerates in the domain of gains. *See* Jolls & Sunstein, *supra* note 7, at 205; Morewedge et al., *supra* note 11, at 947; van Dijk & van Knippenberg, *supra* note 8, at 518.

155. Kahneman et al., *supra* note 5, at 1326–28. For others pointing at loss aversion as the primary psychological mechanism underlying the endowment effect, *see, e.g.*, Jones & Brosnan, *supra* note 147, at 1950; Korobkin, *supra* note 5, at 1250; Korobkin, *supra* note 8, at 688; Morewedge et al., *supra* note 11, at 947; Plott & Zeiler, *supra* note 148, at 1449; Rachlinski & Jourden, *supra* note 139, at 1556.

words, people tend to experience losses from a given benchmark more intensely than they experience gains of a similar objective magnitude.¹⁵⁶ Assuming that individuals view parting with an endowed good as a loss,¹⁵⁷ individuals typically evaluate a loss as greater than the potential gain associated with acquiring an identical good, which creates the endowment effect.¹⁵⁸ It should be emphasized that according to the loss aversion account, the endowment effect is not a result of the enhanced valuation of the entitlement one owns, but rather represents the disutility associated with giving up the entitlement.¹⁵⁹ Under this theory, WTP is considered to be a more accurate measure of the claimant's value for the entitlement at issue.¹⁶⁰

Recently, a growing list of findings casts doubt on the ability of the loss aversion account to explain the endowment effect.¹⁶¹ In any event, attributing the endowment effect to loss aversion only begs the question as to why loss aversion occurs.¹⁶² One potential answer to this question is that many people simply do not view opportunity costs as equivalent to out-of-pocket costs despite the fact that economists traditionally view them as equivalent.¹⁶³ Of the many other suggested explanations for why people appear to value losses more than equivalent gains, the most prominent is regret avoidance.¹⁶⁴

156. Liberman et al., *supra* note 59, at 1136.

157. See Bar-Hillel & Neter, *supra* note 17, at 26 (explaining that once an item becomes part of one's endowment, giving it up is experienced as a loss); James K. Beggan, *On the Social Nature of Nonsocial Perception: The Mere Ownership Effect*, 62 J. PERSONALITY & SOC. PSYCHOL. 229, 235 (1992) (noting that when "people encode a given possession as part of their current wealth," they then "view selling the possession as a loss").

158. Bar-Hillel & Neter, *supra* note 17, at 26; see also Liberman et al., *supra* note 59, at 1136 (noting that the pleasant experience of receiving a new object cannot compensate for the more intense negative experience of giving up an object one already has); van Dijk & van Knippenberg, *supra* note 6, at 486 (describing loss aversion as a "tendency for the disutility of losing an object to exceed the utility of gaining the same object").

159. Daniel Kahneman et al., *The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP. 193, 197 (1991); Lewinsohn-Zamir, *supra* note 5, at 252.

160. See, e.g., Korobkin, *supra* note 5, at 1258 (explaining that under this theory, if the state does not initially award the entitlement to the claimant, she will never actually incur the costs of selling that she would bear if she were to give up the entitlement); Korobkin, *supra* note 8, at 696 (noting that under this theory, the claimant will be indifferent to the choice between owning the entitlement and having an amount of cash equal to her WTP as long as she does not have to engage in the act of selling the entitlement).

161. See, e.g., Morewedge et al., *supra* note 11, at 950 (presenting experiments showing that loss aversion is not the cause of the endowment effect); Plott & Zeiler, *supra* note 148, at 1452 (rejecting the claim that loss aversion accounts for observed asymmetries in exchange).

162. Rachlinski & Jourden, *supra* note 139, at 1557; see also Jones & Brosnan, *supra* note 147, at 1951–52 (arguing that loss aversion is not a satisfying theoretical foundation for the endowment effect and noting it is like "saying that rain is caused by a rainstorm").

163. Korobkin, *supra* note 5, at 1250 (noting that this "pure" loss aversion explanation can account for many of the endowment effect experiments but cannot explain all of them).

164. Other second-order explanations for loss aversion are related to the disutility caused by selling. In some cases, individuals may resist participating in market transactions,

Regret avoidance is a factor that may account for loss aversion, in general,¹⁶⁵ and the endowment effect, in particular.¹⁶⁶ People tend to view the possibility that, in hindsight, they made a bad decision as a risk that needs to be minimized.¹⁶⁷ As a result, people have a strong tendency to maintain the status quo.¹⁶⁸ Considering that people fail to purchase many entitlements on a daily basis, fear of regret is likely to be greater with respect to a decision to take action (i.e., relinquish an entitlement) than with respect to a decision not to take action (i.e., not purchase an entitlement).¹⁶⁹ Thus, selling an object has a greater potential to bring about regret than failing to buy the same object. As a result, fear of regret would logically affect WTA prices more than WTP prices. The WTA price would be higher than the WTP price, according to this theory, because the WTA must include a premium that will compensate the owner for the potential regret she may feel after giving up the entitlement.¹⁷⁰

An example of a context in which fear of regret likely causes the endowment effect is the case of lottery tickets.¹⁷¹ People are often reluctant to exchange lottery tickets even when offered a small monetary incentive to do so “not because they bond to the paper on which the ticket is printed, but because trading a ticket away makes people worry that they have traded away a

either in general or specifically with respect to the entitlement at hand, because they perceive such participation as illegitimate or not dignified. In such cases, they might demand a price higher than the inherent value of the entitlement in order to compensate them for the discomfort associated with the act of selling. *See* Korobkin, *supra* note 5, at 1252–53; Korobkin, *supra* note 8, at 693. In other cases, people may prefer to be left alone rather than bargaining and conducting a transaction. Here, too, compensation may be demanded for the costs imposed by the act of selling. *See* Korobkin, *supra* note 5, at 1253; Korobkin, *supra* note 8, at 695–96. On top of these explanations, Korobkin includes attachment in the list of second-order explanations for the loss aversion phenomenon. *See* Korobkin, *supra* note 5, at 1251. Attachment, though, is generally considered an altogether different explanation for the endowment effect, and I will treat it as such. *See infra* notes 175–182 and accompanying text.

165. *See* Korobkin, *supra* note 5, at 1250.

166. *See, e.g.,* Rachlinski & Jourden, *supra* note 139, at 1557 (noting that regret seems to play an important role in the endowment effect).

167. The negative utility consequence of regretting making a bad decision is apparently greater than the positive utility consequence of rejoicing over making a good decision. *See* Korobkin, *supra* note 5, at 1254.

168. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 12.

169. *See* Korobkin, *supra* note 5, at 1254 (emphasizing that the regret avoidance explanation must rely, among other things, on the assumption that the utility consequence of regretting a bad decision to enter into a transaction must be greater than the utility consequence of regretting a bad decision not to enter into a transaction); Korobkin, *supra* note 8, at 696 (noting that “[i]f I exhausted myself with regret every time I missed an opportunity, I would have very little time to do anything else with my life”); Rachlinski & Jourden, *supra* note 139, at 1557 (noting that people apparently regret taking action more than deciding not to take action).

170. *See* Korobkin, *supra* note 5, at 1254; Korobkin, *supra* note 8, at 696.

171. *See supra* note 80.

winning ticket.”¹⁷² Failing to win the lottery with an exchanged ticket while the original ticket wins is experienced as an out-of-pocket loss, whereas failing to win the lottery with the original ticket represents a foregone gain, and the former is weighted more heavily than the latter.¹⁷³ The “regret aversion” explanation is supported by findings that “endowment effects are more likely to be observed when prospective gains and losses are difficult to integrate, due to either high uncertainty about future exchange prices or reduced comparability of consumer goods.”¹⁷⁴

The Ownership/Attachment Account

The endowment effect may also exist as a result of an entitlement becoming more valuable upon ownership rather than as a consequence of negative emotions associated with the sale. In other words, upon ownership, special valuable features of the good that enhance its total value may be created.¹⁷⁵ Such enhanced value may be the result of the owner forming an emotional attachment to the entitlement.¹⁷⁶ The enhanced value may also result from sentimental value and familiarity.¹⁷⁷ Similarly, according to the ownership account of the endowment effect, people are often reluctant to relinquish the goods they own because they associate those goods with themselves and thus ascribe them higher values.¹⁷⁸ A related explanation is that the endowment effect is the result of individuals’ efforts to reduce

172. Rachlinski & Jourden, *supra* note 139, at 1557; *see also* Bar-Hillel & Neter, *supra* note 17 (showing that the fear of giving up a winning ticket drives participants’ reluctance to trade, and ruling out other potential explanations for such reluctance including overestimation of the winning probability of one’s own ticket); Mandel, *supra* note 11, at 738 (pointing out that loss aversion may account for why people are reluctant to exchange lottery tickets). *See generally* Michal Maimaran, *Reducing the Reluctance to Exchange Gambles* (The Hebrew U. of Jerusalem Ctr. for Study of Rationality, Discussion Paper No. 341, 2003), available at <http://ratio.huji.ac.il/dp/dp341.pdf> (presenting experiments reaffirming Bar-Hillel & Neter’s conclusions).

173. Maimaran, *supra* note 172, at 3; *see also* Bar-Hillel & Neter, *supra* note 17, at 25. “[F]rom the vantage point of a ticket owner, the state of the world in which one’s original ticket wins . . . but the new one does not, represents a “loss,” whereas the state of the world in which the new ticket had one exchanged for it, would have won, but holding onto one’s original ticket results in no win, is merely a foregone gain.” *Id.*

174. Mandel, *supra* note 11, at 738.

175. *See* Plott & Zeiler, *supra* note 148, at 1453.

176. Cotter, *supra* note 53, at 61 (“One explanation [for the endowment effect] is that people tend to become psychologically attached to their initial endowments, perhaps because they come to view these endowments as aspects of their personalities.”); *see also* Korobkin, *supra* note 8, at 691 (noting that an entitlement may become more valuable upon ownership as a result of attachment).

177. *See* Plott & Zeiler, *supra* note 148, at 1453.

178. *See* Morewedge, et al., *supra* note 11, at 947–50 (describing experiments showing that ownership, rather than loss aversion, is what causes the endowment effect); *see also* Beggan, *supra* note 157, at 229–30 (noting that ownership creates a psychological association between the object and the owner).

cognitive dissonance by high valuation of what one owns and low valuation of what one does not own.¹⁷⁹

What is common to all of these explanations is that they describe ownership as associated with phenomena that transform the features of goods such that the good to be given up is not the same as the good that was acquired.¹⁸⁰ These explanations for the endowment effect are more plausible in some circumstances than in others.¹⁸¹ When one or a combination of these explanations accounts for the endowment effect exhibited by an entitlement claimant in a particular case, it is generally agreed upon that the appropriate measure of such claimant's valuation of the entitlement would be her WTA rather than her WTP.¹⁸²

Analysis of the Buccafusco and Sprigman Findings

What caused the effects observed in the Writers' experiments? In their first study,¹⁸³ the Writers concluded that the results were the effect of both regret aversion and an "optimism/ownership bias."¹⁸⁴ The conclusion that optimism bias contributed to the result was based on the subjects' responses to a follow-up question in which they were asked to estimate their poem's probability of winning the prize. Subjects in all of the roles in the contest scenarios over-estimated their chance of winning the prize, with greater over-estimation by sellers than buyers.¹⁸⁵ Yet the values assigned by the sellers to the poems were even higher than the poems' subjective expected values (i.e., the predicted probability of winning multiplied by the amount

179. Sunstein, *supra* note 147, at 1151; *see also* Beggan, *supra* note 157, at 234–35 (explaining the endowment effect as a result of the desire to maintain a positive sense of self).

180. *See* Plott & Zeiler, *supra* note 148, at 1453.

181. *See* Korobkin, *supra* note 8, at 689 (noting that attachment does not seem to be a likely explanation for why lottery ticket holders value their tickets more than potential purchasers of tickets); *see also* Kahneman et al., *supra* note 5, at 1326 (ruling out attachment as a potential explanation for the endowment effect evidenced in their experiment, where the values assigned by individuals to the relevant objects increased as soon as the objects were given to them, though acknowledging that long-term endowment effects could be explained by attachment).

182. Korobkin, *supra* note 8, at 691 (reasoning that when the entitlement would be in such claimant's possession, it will realize this high value).

183. *See supra* notes 29–35 and accompanying text (describing the first study).

184. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 27. It is not entirely clear what the Writers mean by "optimism/ownership bias." At first, it seems as if they refer to the ownership account described above, as they note people's "tendency to prefer things associated with themselves, and accordingly, to value those things more highly." *Id.* at 27. Yet, later on, they make multiple references to the "overly sanguine estimates people make of their own chances of success," i.e., to "optimism bias," a demonstrated tendency of people to be overly optimistic about certain outcomes, which is not typically considered part of or related to the endowment effect. *Id.* at 27; *see infra* Part IV.B.2.

185. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 27. In the lottery scenario (the third experiment in the first set), the divergences from objective probabilities were much lower, although for the Authors, they were still noticeable. *Id.*

of the prize), which the Writers explained as the result of regret aversion.¹⁸⁶ Noting that endowment effects that grow out of optimism bias lead to inefficiency and that regret aversion is also, most likely, a welfare-reducing bias, the Writers concluded that the endowment effect observed in their study must be mitigated.¹⁸⁷

In their second study,¹⁸⁸ the Writers again found that optimism bias explained some of the results, based on the same type of data regarding the subjects' assessments of how likely their works were to win the prize, with Painters' estimates higher than Owners' and both higher than Buyers'.¹⁸⁹ Here, again, the Writers found that regret aversion may have affected valuations, but because there was no indication that Painters' regret aversion was higher, the sole explanation for the "creativity effect"—i.e., the Painters' enhanced valuations—was their "markedly over-optimistic assessments of their chances to win."¹⁹⁰ In connection with the second study, the Writers also examined the potential role of emotional attachment.¹⁹¹ The Painters were asked to rate their emotional attachment to their works in a follow-up question.¹⁹² It appeared that such ratings did not correlate to the Painters' valuations.¹⁹³ Based on the Painters' answers, Buccafusco and Sprigman concluded that emotional attachment does not play a significant role in creators' valuations of their work.¹⁹⁴ Concluding that the creativity effect is driven primarily by over-optimism, the Writers argue that pricing decisions made by creators cannot be relied upon, and that "debiasing, if it is possible at a reasonably low cost, is an appropriate task for IP law."¹⁹⁵

I disagree with the Writers' analysis for two main reasons: (1) it underestimates the role of attachment in the valuation of IP assets by their

186. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 28.

187. *Id.* at 32–33.

188. *See supra* notes 36–45 (describing the second study).

189. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 42.

190. *Id.* at 43.

191. One of the reasons why the Writers examined the possibility that attachment played a role in the Painters' valuations is that "[a] moral rights theorist might interpret the valuation asymmetries . . . as evidence of the creator's enhanced connection to the work." *Id.* at 41. Note that one does not need to be a "moral rights theorist" in order to acknowledge the personal bond that creators (and inventors) form with their works. While personality theory often underlies arguments in support of moral rights, it has much broader implications for the design of IP law. *See generally* Tur-Sinai, *supra* note 125, at 24–33 (discussing the importance of the personality theory in connection with patent law).

192. The question read, "How would you rate your level of personal and emotional investment or attachment to the painting?" The participant was asked to answer by choosing from a scale from one ("Not at all") to ten ("Very Much"). Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 38 n.27.

193. *Id.* at 41 ("Painters who felt strongly attached to their works were no more likely to assign high values to them than were those who felt less attached to their works.").

194. *Id.*

195. *Id.* at 43.

creators; and (2) it relies on the erroneous assumption that over-optimism necessarily leads to inefficiency.

1. The Role of Attachment in the Valuation of IP Assets

Buccafusco and Sprigman based their conclusion that emotional attachment was not a relevant factor in creators' valuations on a single follow-up question posed to twenty Painters participating in the second experiment.¹⁹⁶ This hardly constitutes sufficient data to support the Writers' inference that attachment is not a factor contributing to the high values ascribed by creators of IP goods—an inference that leads directly to their policy recommendations.¹⁹⁷ Moreover, the narrowly drafted question, whereby the Painters were asked to rate their “level of personal and emotional investment or attachment to the painting,”¹⁹⁸ failed to capture the various potential value-enhancing features that may be created as a result of ownership of a good.¹⁹⁹ It should also be noted that it is not the case that the Painters expressed no attachment to their works in response to this question, but rather that there was no correlation between the degrees of attachment expressed and the values ascribed to the works.²⁰⁰ The lack of such correlation does not mean that attachment was not among the factors contributing to the Painters' higher valuation of the works compared to other subjects whose emotional connection to the works was presumably lower.²⁰¹ For example, the lack of correlation may be the result of Painters' different ways of quantifying their emotional attachment or the result of other factors that ultimately combined with attachment in forming individual valuations.

In any event, even if emotional attachment did not drive the Painters' high valuations in the second experiment, the experiment does not effectively represent the reality of IP transactions. The entitlement changing hands in the experiment was the chance to win a financial prize.²⁰² The valuation thus referred to that chance rather than to the underlying work. While a creator's

196. The effect of creators' emotional attachment on valuation may be examined through an experiment (rather than a follow-up question). For an experiment that could be used for this purpose, see *supra* note 55.

197. See, e.g., Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 43 (noting that “[w]hile there might be good reasons to credit creators' valuations if they are the result of regret aversion or enhanced feelings of emotional attachment, we can see no valid reason for respecting pricing decisions that are driven almost exclusively by irrational biases”).

198. See *supra* note 192.

199. See *supra* notes 175–179 and accompanying text.

200. See *supra* note 193. No further information about the data was provided in the Studies. For example, it is not clear whether the differences in the levels of attachment specified by the subjects were significant or relatively minor.

201. Buccafusco & Sprigman themselves acknowledge the possibility that even though relatively more attachment did not result in higher values within the class of Painters, overall differences in emotional attachment between Painters and Owners or Buyers may have affected valuation. See Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 41 n.38.

202. See *supra* text accompanying note 72.

attachment to her work may have some impact on her valuation of the right to participate in a contest,²⁰³ it makes sense that such effect would not be particularly strong.²⁰⁴ In contrast to the experiment, however, when an IP owner grants a license to use her work, her emotional attachment to the work is likely to have a strong effect on her pricing decisions.²⁰⁵

The personal bond between creators and their works is known to be particularly strong in comparison to the general level of attachment that owners may develop towards their goods.²⁰⁶ Such strong bonds result, among other things, from the fact that the personality of a creator is often embedded in her work.²⁰⁷ This is precisely why the personality theory—which justifies private property based on its role in enabling a person to develop her personality—has been commonly used in connection with intellectual property in general and copyright law in particular.²⁰⁸ It should be emphasized

203. For instance, a creator who has emotional attachment to her work may value being the one who actually receives the prize should her work win, and this may cause her to ascribe a higher value to the chance of winning the prize. Indeed, from the creator's perspective, winning the contest may be worth not only the monetary prize of one hundred dollars but also the value of the prestige associated with receiving the prize.

204. The similarity between the chance to win the prize and a lottery ticket has already been noted. See *supra* notes 80–81 and accompanying text. As explained above, attachment does not seem to be a likely explanation for why lottery ticket holders value their tickets more than potential purchasers of tickets. See *supra* note 181.

205. Cf. Korobkin, *supra* note 5, at 1252 (viewing the attachment account as a promising explanation for the particularly strong endowment effect demonstrated in connection with earned goods, as it might be easier to create a sentimental bond with an entitlement that was not acquired randomly than with one that was).

206. See, e.g., Lawrence C. Becker, *Deserving to Own Intellectual Property*, 68 CHI.-KENT L. REV. 609, 610 (1993); Brian M. Hoffstadt, *Dispossession, Intellectual Property, and the Sin of Theoretical Homogeneity*, 80 S. CAL. L. REV. 909, 935 (2007); Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 330, 365 (1988); Stephen M. McJohn, *The Paradoxes of Free Software*, 9 GEO. MASON L. REV. 25, 45 (2000); David W. Opderbeck, *Symposium: Closing In on Open Science: Trends in Intellectual Property & Scientific Research: A Virtue-Centered Approach to the Biotechnology Commons (or, the Virtuous Penguin)*, 59 ME. L. REV. 315, 319 (2007).

207. See Justin Hughes, *The Personality Interest of Artists and Inventors in Intellectual Property*, 16 CARDOZO ARTS & ENT. L.J. 81, 82 (1998) (discussing various personality aspects that may come into play during the process of creating an intellectual product). The identification with an intellectual product may also be particularly strong in comparison with the identification with other types of assets in light of the inherent uniqueness of such product.

208. The personality theory was originally formulated by Hegel. See G.W.F. HEGEL, *PHILOSOPHY OF RIGHT* (S.W. Dyde trans., 1996) (1821). The theory was more recently refined by Professor Radin. See Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957 (1982). In fact, the approach described in the text, in which a personhood interest can result from the personality of the creator being embedded in her work, deviates from Radin's version of the personality theory, which focuses on the attachment created between an object and its holder while attributing no significance to the development process of the object, and is certainly remote from Hegel's original theory. See Tur-Sinai, *supra* note 125, at 26. Interestingly, though, such an approach has early roots in the writings of Kant and Fichte, who viewed literary works specifically as external expressions of their authors' personalities. See generally PETER DRAHOS, *A PHILOSOPHY OF INTELLECTUAL PROPERTY* 80–81 (1995); DAVID SAUNDERS, *AUTHORSHIP AND COPYRIGHT* 106–15 (1992).

that such an emotional bond, resulting largely from the extent to which an intellectual product reflects the personality of its creator, may exist not only with respect to creative works of authorship, the subject matter of copyright protection, but also with respect to inventions that are the subject matter of patent protection.²⁰⁹ An invention is often a unique intellectual product where the inventor's education, intellectual skills, professional experience, vision, and imagination all come into play.²¹⁰ Creators' and inventors' emotional connection with their intellectual products may be enhanced even further during the ongoing process of commercialization.²¹¹ While commercializing her product, the inventor or author often reveals herself to other individuals who learn to recognize her first and foremost as the creator of such work. The creator becomes identified with the work²¹² and the work becomes part of her public persona.²¹³ This may ultimately increase the creator's valuation of the work even further.

The emotional connection that a creator develops towards her work may undoubtedly affect not only her valuation of the work, but also her decisions regarding the prices to be charged for various uses of the work. When a person cares about something personally, she is also likely to feel more personally about the prices charged for using it. For instance, an artist who feels attachment to her painting may also hold a sense of entitlement and pride with respect to such painting,²¹⁴ and consequently may be hurt if the piece sells for what she considers to be too low of a price.²¹⁵ Moreover, due

209. For a detailed presentation of this argument, see Tur-Sinai, *supra* note 125, at 26–27.

210. Cf. Steven Chersensky, *A Penny for Their Thoughts: Employee-Inventors, Preinvention Assignment Agreements, Property, and Personhood*, 81 CAL. L. REV. 595, 598 (1993) (noting that the employee's interest in an intellectual product she developed may be based on investment of personal capital, i.e., "training and education, personality, individual genius, extraordinary effort, creative spark, and even divine revelation").

211. Such ongoing commercialization is possible thanks to the non-rival nature of intellectual products. The owner of an IP good can commercialize it (i.e., sell physical embodiments of it and/or grant licenses to use it) without hurting her ability to continue to do so in the future.

212. See Robert Merges, *Intellectual Property Rights and Bargaining Breakdown: The Case of Blocking Patents*, 62 TENN. L. REV. 75, 90 n.61 (1994) (discussing the tendency of inventors to strongly identify with their inventions); cf. Russell W. Belk, *Possessions and the Extended Self*, 15 J. CONSUMER RES. 139, 144, 150 (1988) (presenting multidisciplinary evidence supporting the premise that our possessions in general are a major contributor to and reflection of our identities, and listing creation as one of the means by which things become a part of the self).

213. Cf. Hughes, *supra* note 206, at 343.

214. See generally Lowenstein & Issacharoff, *supra* note 5, at 158 (noting that cognitive theories of emotions mention pride as one of the emotions that one can experience as a result of a positive outcome, specifically when the outcome is due to one's own efforts).

215. See Sunstein, *supra* note 147, at 1151; see also *supra* text accompanying note 179 (arguing that the endowment effect reflects an effort to reduce cognitive dissonance by the high valuation of what one owns). This argument seems to be even stronger in the context of valuing what one has created. The creator may also be concerned that selling for a low price indicates her low confidence in her work, which may end up detrimentally affecting her career.

to the special personal connection between a creator and her work, pricing, as well as the initial decision whether to license at all, may also be affected by the specific purpose for which a license is requested. A creator may ascribe lower prices to specific uses of the work that she favors, due to artistic considerations or other reasons, than to uses that she disfavors.

To the extent the endowment effect in IP transactions results from the personal connection between creators and their works, it is fully consistent with the rational choice model.²¹⁶ Therefore, even under the “highest value user” principle,²¹⁷ no intervention is necessary, as the WTA price in such case is a rational and legitimate measure of value rather than a mistake that needs correction.²¹⁸ In other words, there is no justification for debiasing a creator who factors her attachment to her work or other comparable emotions into her pricing decisions.²¹⁹ Even if such behavior ultimately results in fewer transactions, it does not mean that such number is suboptimal or that such result is inefficient. Attachment of creators to their works should be respected by the legal system. A regime that does not respect creators’ attachment is not only likely to act against the personality interests of creators,²²⁰ but also may result in great inefficiency by diminishing the incentive to create new IP goods.

2. Over-Optimism Does Not Necessarily Lead to Inefficiency

The Writers conclude that the creativity effect detected in their Studies was driven mostly by over-optimism, and hence debiasing is warranted.²²¹ Even assuming that over-optimism played a significant role in the subjects’

216. The rational choice model is the conventional assumption of law and economics pursuant to which people exhibit rational choice, i.e., they are “self-interested utility maximizers with stable preferences and the capacity to optimally accumulate and assess information.” Arlen, *supra* note 11, at 1766.

217. See *supra* Part IV.A.

218. See *supra* note 182 and accompanying text; see also *supra* note 197.

219. As stated above, when attachment is the reason for the endowment effect, it is generally agreed upon that the WTA price is the right measure. See *supra* note 182 and accompanying text; see also Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 41 (noting that when the endowment effect is a result of the creator’s enhanced connection to the work, a “moral rights theorist” would assert that the law should make no attempt at debiasing authors). As noted above, the argument made herein has nothing to do with moral rights. See *supra* note 191. While it is true that various scholars have used the existence of a strong connection between authors and their works in support of arguments calling for strengthening authors’ moral rights, the point made herein is different. As explained above, my argument is that inasmuch as the personal connection of creators to their work affects their pricing decisions, such decisions need to be respected. See generally Rachlinski & Jourden, *supra* note 139, at 1576 (noting that inasmuch as the law reflects people’s attachment to certain possessions, it would be inappropriate to try to undermine this attachment by changing the law).

220. See *supra* note 208 and accompanying text (discussing personality theory).

221. See *supra* text accompanying notes 190, 195.

valuations,²²² and accepting that over-optimism may play a significant role in reality as well,²²³ legal intervention is not justified.

Over-optimism is considered to be a common trait.²²⁴ It is usually discussed in connection with people's tendency to overlook potential bad outcomes,²²⁵ but it can also account for the tendency to overestimate the likelihood of good outcomes.²²⁶ While in many contexts over-optimism may be problematic (for example, by leading individuals to employ sub-optimal cautionary measures²²⁷), it can also be beneficial. For example, in a business setting, over-optimism "seems directly related to good mental health and is consistent with high company morale."²²⁸

In the context of creating IP goods, optimism on behalf of authors or inventors is often positive and may play an important role in establishing the necessary level of incentives to motivate creation or invention.²²⁹ Authors and inventors often take on large risks, as they must invest time, money, mental and physical exertions, and other resources in the process of creating a new work or developing a new invention while facing high levels of uncertainty.²³⁰ Even after the creation process is completed, authors and inventors may need to invest further resources to commercialize their works

222. Here, again, the conclusion relied on a single follow-up question in which the subjects were asked to predict their probability of winning the prize. As this question was asked after the subjects had already specified their WTA prices, it is possible that there was an element of self-justification in their answer ("if I demand so much, I must estimate my chances to win highly"), even if the real reasons driving the high valuation may have been different.

223. As explained above, there may in fact be other considerations, such as emotional attachment, that surely have a significant effect on valuation as well.

224. See, e.g., Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 STAN. L. REV. 211, 225 (1995) (noting that individuals are "systematically disposed toward undue optimism"); Benjamin Means, *A Contractual Approach to Shareholder Oppression Law*, 79 FORDHAM L. REV. 1161, 1175 (2010) (noting the human tendency to overvalue the likely success of projects and to underestimate risks); Rachlinski, *supra* note 53, at 1172 (mentioning over-optimism in connection with the "family" of self-serving biases); Cass R. Sunstein, *Review: Hazardous Heuristics*, 70 U. CHI. L. REV. 751, 772 (2003) (noting that "[w]ith respect to most of the risks of life, people appear to be unrealistically optimistic"); Sean Hannon Williams, *Sticky Expectations: Responses to Persistent Over-Optimism in Marriage, Employment Contracts, and Credit Card Use*, 84 NOTRE DAME L. REV. 733, 742–45 (2009) (providing numerous examples of common manifestations of optimism bias).

225. See, e.g., Arlen, *supra* note 11, at 1773 (noting that empirical evidence "suggest[s] that people make consistent and systematic errors in risk assessment").

226. See, e.g., Gordon, *supra* note 58, at 71 (referring to Adam Smith's statement that many people are overly optimistic about their chances for success); Jolls & Sunstein, *supra* note 7, at 204–05.

227. See Jolls & Sunstein, *supra* note 7, at 205–06 (discussing possible ways to debias over-optimism).

228. Rachlinski, *supra* note 53, at 1211.

229. Cf. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 45–46 ("In many cases, the willingness to engage in creative tasks may itself be a function of individuals' excessive optimism about the likelihood of success.").

230. See, e.g., Tur-Sinai, *supra* note 68, at 735–36.

in a competitive environment where success is not guaranteed.²³¹ Not all authors and inventors make a profit that even covers their costs. Thus, in order to encourage the development of creative goods, a certain degree of excess optimism on behalf of artists and inventors should be accepted.²³² In fact, if artists and inventors were not optimistic about their ability to make money, some innovative and creative endeavors would never be realized.²³³

Moreover, while the Studies could accurately identify excessive optimism as clearly irrational behavior,²³⁴ reality is different. A creator's refusal to license her work because she believes she deserves more money than what is currently offered is not necessarily irrational. In fact, a creator who insists on a higher price for using her work may actually obtain more money, either from the specific licensee she is currently negotiating with²³⁵ or from other prospective licensees seeking to make a similar use. Even if the creator has misjudged the market and fails to sell the rights to her work, her over-optimism may correct itself without the need for intrusive external interventions in the form of liability rules or broadened fair use privileges. As noted above, creators of IP goods generally have high motivation to license such goods.²³⁶ Thus, creators who initially demand non-realistic fees for the use of their work will likely reevaluate their chances and readjust their prices after receiving feedback from the market.²³⁷ An initial high price demanded by

231. See generally Kieff, *supra* note 126, at 707–08 (listing the numerous activities that must take place after an invention is made but before it can be profitably exploited).

232. Cf. Dennis D. Crouch, *The Patent Lottery: Exploiting Behavioral Economics for the Common Good*, 16 GEO. MASON L. REV. 141, 172 (2008) (proposing to harness over-optimism of entrepreneurs and investors to produce positive effects in social policy).

233. Interestingly, for many innovators, the ability to earn an occasional windfall is an important factor in the *ex ante* decision to embark on a specific creative endeavor. See, e.g., F. M. Scherer, *The Innovation Lottery*, in EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY: INNOVATION POLICY FOR THE KNOWLEDGE SOCIETY 3, 20 (Rochelle Dreyfuss et al. eds., 2001) (arguing that there are investors who attribute great importance to the potential to earn particularly big rewards, even if such possibility is rare); Justin Hughes, *Copyright and Its Rewards, Foreseen and Unforeseen*, 122 HARV. L. REV. F. 81, 82 (2009) (noting that many sectors of intellectual property are “gamble economies” in which investments are made in portfolios with the expectation that “occasional blockbuster successes” would occur); see also Crouch, *supra* note 232, at 142 (arguing that policies that marginally increase the potential size of the patent reward may have more impact on innovative activity than those that marginally increase the probability of obtaining value from a patent).

234. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 32 (explaining that “[r]efusing to sell a lottery ticket for anything less than \$20 because you inaccurately believe it has a higher chance to win is inefficient”).

235. See Rachlinski, *supra* note 53, at 1223 (“[N]egotiators who believe that they are entitled to more than a fair share actually obtain more in negotiations.”).

236. See *supra* notes 95–105 and accompanying text.

237. See generally Arlen, *supra* note 11, at 1782 (“People operating in certain markets where learning is possible and errors are punished . . . may not be overly optimistic.”). Admittedly, due to the inherent uniqueness of each new IP product, the corrective role played by market learning in IP transactions may be somewhat smaller; but it would still be significant, especially in the context of the ongoing commercialization process of a particular work.

a seller is often merely a strategic starting point for negotiation.²³⁸ Therefore, there is no need to be overly concerned about creators' over-optimism.

Over-optimism can also characterize buyers' behavior,²³⁹ which may mitigate the endowment effect. For example, a potential licensee of an IP good may be willing to pay an "irrationally" high amount of money for a license due to her own over-optimism with respect to the project in which she intends to use such IP good.

All in all, the data gathered in the Studies is not sufficient to make a clear case for debiasing. Even to the extent the effects recognized in the Studies might reflect reality, such effects do not necessarily constitute mistakes that need to be corrected. There are many possible reasons for the difference between WTA and WTP, and the applicable reasons may change from one case to another. In the context of IP transactions, emotional attachment and other similar factors may serve a significant role in valuations. Creators' attachment to their works should be respected, not corrected, by the legal system. Over-optimism on behalf of creators, too, does not necessarily lead to inefficient results, and may be even helpful in counter-balancing the financial risks associated with creative activity. All things considered, there is simply no justification for the Writers' prescription to fix what is not broken and weaken intellectual property rights.

V. CRITICAL ANALYSIS: THE SPECIFIC PROPOSALS

Even if it were true that the Writers' experiments indicate a strong endowment effect that is indicative of reality and justifies intervention, the specific intervening proposals suggested in the Studies are problematic. Prior to delving into the specific shortfalls of each recommendation, a few general points should be noted.

First, in seeking to neutralize the perceived outcomes of the endowment effect, the Writers do not give sufficient consideration to the potential negative implications of their suggested changes to the various goals of our IP

238. See *supra* text accompanying note 108 (discussing the ability to bargain in the actual markets). Allegedly, the fact that bargaining was not an option for the participants in the Studies may indicate that the prices they demanded were final prices that could not be lowered. In reality, however, if there were no takers in such "final" price, an owner with high transaction demand could nevertheless agree to settle for a lower price. Beyond that, subjects may be so programmed to respond strategically to inquiries regarding their pricing decisions—i.e., sellers tend to begin negotiations with high demands while buyers tend to begin with low offers—that the values elicited in experimental settings may still be biased by such habits, even when no bargaining is allowed. See generally Kahneman et al., *supra* note 5, at 1326 (noting that in reality, "[s]ellers are often rewarded for overstating their true value, and buyers for understating theirs," and therefore, "[b]y force of habit they may misrepresent their true valuations even when such misrepresentation confers no advantage"); Korobkin, *supra* note 5, at 1243 (describing this "strategic heuristic").

239. In Buccafusco & Sprigman's experiments, the buyers showed over-optimism in their predictions of their chances to win, though to a lesser degree than the sellers. See *supra* note 185 and accompanying text.

system.²⁴⁰ Under economic theory, IP laws are designed first and foremost to incentivize the creation of new IP goods.²⁴¹ The Writers' suggestions, e.g., the proposed expansion of the doctrine of fair use in copyright law and similar doctrines,²⁴² may have a detrimental effect on such incentives.²⁴³ Alongside the economic goals of IP laws, there are other theoretical foundations for IP rights, such as the labor and personality theories.²⁴⁴ The Writers similarly ignore in large part such alternative theories and their respective values,²⁴⁵ such as the need to provide just reward for labor and the need to enable individuals to develop their personalities. The proposals made in the Studies could potentially undermine such values. For example, a general shift towards liability rules in IP law may run against the labor theory's basic argument that laborers should be awarded property rights in the fruits of their labor.²⁴⁶ Hence, even if the changes recommended by the Writers were effective in removing obstacles for transacting in IP markets, such changes would be undesirable from other perspectives.

Second, the Writers' recommendations are overbroad and not sufficiently tailored to address the narrow problem discussed in the Studies. For example, the suggestion to vest initial ownership of IP rights more often in

240. But see Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 44 (implying a need for further research to assess the respective costs and benefits of the suggested solutions).

241. See *supra* notes 126–127 and accompanying text.

242. See discussion *infra* Part V.C.

243. Admittedly, however, expanding such doctrines may increase the freedom to engage in the creation of second-generation works. All in all, it is hard to evaluate the cumulative effect.

244. Labor theory, based on the work of John Locke, posits that every person has a right to the fruits of her labor. See JOHN LOCKE, *TWO TREATISES OF GOVERNMENT* 290–91 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690). Personality theory, as explained above, focuses on private property as a means to enable individuals to develop and realize their personalities. See *supra* note 208 and accompanying text. See generally Tur-Sinai, *Beyond Incentives*, *supra* note 125 (promoting a broader use of labor and personality theories as part of the framework for patent law analysis).

245. The Writers briefly acknowledge the existence of “noneconomic justifications for IP rights” but stick to the framework of economic analysis. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 3 n.10. Interestingly, one follow-up question for the Painters in the second experimental set required them to specify the number of hours they had spent on the work. When analyzing the results, the Writers note that the number of hours spent by each Painter did not correlate with the Painter's valuation. Based on this data, the Writers conclude that labor plays an insignificant role in creators' valuation of their work. See Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 41. It is doubtful whether the data supports such conclusion. Cf. *supra* notes 196–201 and accompanying text (criticizing the comparable inference of the Writers with respect to the effect of emotional attachment on the Painters' valuations).

246. As another example, the expansion of the fair use doctrine, which essentially allows free use of a copyrighted work without even trying to get the creator's prior consent, may arguably diminish the creator's ability to uniquely identify herself with her work and enjoy adequate recognition from others, as may be required in order for her to fully develop her personality. Such a potential effect of the suggested reform needs to be evaluated and taken into account.

the hands of intermediaries such as an employer or another person who is not the individual creator herself²⁴⁷ is likely to have a broad effect which exceeds the narrow goal of the Writers to address the endowment effect. The person who owns an IP right gains control over many decisions in contexts where the endowment effect plays no role. The owner of a copyright, for example, has control over all decisions about whether to create, or license others to create, derivative works based on the copyrighted work.²⁴⁸ Similarly, a shift from property rule protection to liability rule protection, if not explicitly limited to narrowly-crafted contexts,²⁴⁹ may have a far wider effect than what is necessary to address the endowment effect “problem” pointed out by the Writers. For example, the analysis conducted in the Studies does not provide justification for depriving a patent or copyright owner of property rule protection vis-à-vis a mere imitator.²⁵⁰

Third, the Writers’ use of the word “debiasing” to describe their suggestions²⁵¹ is a misnomer. As explained above, debiasing is the action of steering people in more rational directions by operating directly on their behavior.²⁵² It is only one of the possible approaches to address deviations from the rational choice model, also known as “bounded rationality.”²⁵³ An alternative approach is to insulate outcomes from the effects of bounded rationality without trying to affect it. This is known as an “insulating technique.”²⁵⁴ Debiasing generally represents a less intrusive, more direct, and more democratic response to the problem of bounded rationality.²⁵⁵ It aims to correct errors while still preserving as much opportunity as possible for people to make their own choices.²⁵⁶ It also reduces the effects of the legal intervention on those not suffering from bounded rationality in the first place.²⁵⁷

247. See *infra* Part V.D.

248. 17 U.S.C. § 103 (2007).

249. See *infra* note 265 (listing examples of such narrow liability rules suggested by scholars in various contexts).

250. See also *infra* text following note 297 (making a similar argument related to the suggestion to insert formalities into copyright law).

251. See, e.g., Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 41, 46; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 30, 31.

252. See *supra* note 7.

253. For the rational choice model, see *supra* note 216.

254. Jolls & Sunstein, *supra* note 7, at 199. A third alternative is not to respond at all. See *id.* at 225–36 (noting that a governmental response is likely to be unwarranted, for instance, when people are able to correct their own errors); *supra* text accompanying notes 234–238 (implicitly embracing such an approach in relation to the perceived over-optimism of creators while explaining that such over-optimism may correct itself without the need for intervention).

255. Jolls & Sunstein, *supra* note 7, at 200–01.

256. *Id.* at 202.

257. *Id.* at 202, 226.

However, using “debiasing” in the context of the measures suggested in the Studies is inaccurate. Expanding the fair use exception in copyright law, for instance, is better characterized as a direct insulating technique.²⁵⁸ The suggested shift to liability rules is another insulating solution because the Writers propose employing them to ensure that certain transfers occur not by affecting owners’ preferences but by forcing such transfers upon owners.²⁵⁹

A. Liability Rules

The first solution the Writers consider is to increase the use of liability rules in IP law in lieu of property rules. An entitlement is protected by a property rule if no one can appropriate it without the consent of the owner at a price she determines.²⁶⁰ A liability rule, on the other hand, allows for the transfer of the entitlement without the consent of its owner as long as the owner receives adequate compensation as determined by the courts or by another organ of the state.²⁶¹ The Writers question IP law’s preference for property rules, arguing that combined with the existence of endowment effects, property rules might impose substantial bargaining costs arising from the need to bridge the large differences in valuations between the parties.²⁶² The Writers therefore suggest that policymakers “consider shifting IP law’s mix of entitlements toward liability rules.”²⁶³

The existence of transaction costs in the markets for IP rights is well documented and has been considered by scholars investigating the choice between property rules and liability rules in the IP context.²⁶⁴ The prevalent

258. While in some cases the fair use exception may also have an indirect effect on negotiations between parties uncertain of the applicability of the fair use defense to their case, its main effect is to permit uses that would otherwise be blocked because of the owner’s so-called bounded rationality.

259. See *infra* notes 277–280 and accompanying text.

260. Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1092, 1105 (1972).

261. *Id.* at 1092, 1106–10.

262. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 51–52; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 33–35.

263. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 32.

264. See Eisenberg, *supra* note 126, at 1073; Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCIENCE 698, 701 (1998); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1053–65 (1997); Merges, *supra* note 212, at 89–91, 99–100; Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 874–75 (1990); Maureen A. O’Rourke, *Toward a Doctrine of Fair Use in Patent Law*, 100 COLUM. L. REV. 1177, 1179 (2000); Arti Kaur Rai, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 NW. U. L. REV. 77 (1999) [hereinafter Rai, *Regulating*]; Arti Kaur Rai, *Evolving Scientific Norms and Intellectual Property Rights: A Reply to Kieff*, 95 NW. U.L. REV. 707 (2001); see also *supra* note 53 (listing scholarly publications dealing with the endowment effect itself in connection with IP law).

view, however, is that other than in specific and relatively narrow contexts,²⁶⁵ property rules should generally be used to protect IP rights.²⁶⁶ In many situations involving intellectual property rights, property rules entitlements drive industry participants to invest in institutions that lower the costs of exchange in the presence of high transactions costs.²⁶⁷ These institutions include copyright collecting societies, such as the American Society of Composers, Authors, and Publishers ("ASCAP"),²⁶⁸ and patent pools that facilitate market transactions and ease access to patented technologies.²⁶⁹ Property rules, accordingly, have been proven to work effectively.²⁷⁰

Moreover, liability rules have significant disadvantages that the Studies do not fully take into account.²⁷¹ Most importantly, liability rules may

265. See, e.g., Jerome H. Reichman, *Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation*, in EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY: INNOVATION POLICY FOR THE KNOWLEDGE SOCIETY 23, 39–48 (Rochelle Cooper Dreyfuss et al. eds., 2001) (proposing a liability rule regime with respect to cumulative subpatentable developments); Janice M. Mueller, *No "Dilettante Affair": Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools*, 76 WASH. L. REV. 1, 9–10, 54–55 (2001) (suggesting, with respect to biomedical research tools, employing a liability rule regime in the development stage of follow-on products); Katherine J. Strandburg, *What Does the Public Get?: Experimental Use and the Patent Bargain*, 2004 WIS. L. REV. 81, 142–46 (2004) (supporting a compulsory licenses regime with respect to research tools that would be triggered a few years after the registration of the patent); Tur-Sinai, *supra* note 68, at 760–66 (advocating the use of liability rules in the specific context of cumulative innovation in patent law).

266. See, e.g., Kieff, *supra* note 126, at 732 (arguing that "only property rules are appropriate for patents"); Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, 94 COLUM. L. REV. 2655, 2664–67 (1994) (discussing the justifications for a property rule regime in connection with IP rights).

267. Merges, *supra* note 266, at 2655; see also Merges, *supra* note 121, at 1293 (arguing that repeat players can and often do take steps to overcome transaction bottlenecks).

268. ASCAP is "the private copyright organization that collects composers' performance rights for licensing to radio stations and nightclubs." Merges, *supra* note 266, at 2662 n. 26.

269. See Heller & Eisenberg, *supra* note 264, at 700; see also Robert P. Merges, *Institutions for Intellectual Property Transactions: The Case of Patent Pools*, in EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY: INNOVATION POLICY FOR THE KNOWLEDGE SOCIETY 123 (Rochelle Cooper Dreyfuss et al., eds., 2001); John H. Barton, *Patents and Antitrust: A Rethinking in Light of Patent Breadth and Sequential Innovation*, 65 ANTITRUST 449, 462–65 (1996); Rai, *Regulating*, *supra* note 264, at 129–33.

270. Liability rules, in contrast, are expected to work against such flexible voluntary institutions by removing to a large extent the parties' motivation to engage in their creation. See Merges, *supra* note 266, at 2662, 2669 (citing PAUL GOLDSTEIN, COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE § 11.0 (1989)) (noting that compulsory licenses may prevent the creation of organizations that would efficiently administer the rights-clearance process). See also *id.* at 2670–72 (arguing that another primary reason to favor voluntary institutions is the difficulty of dislodging compulsory licenses even in the face of radically changed circumstances).

271. But see Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 51–52 (generally noting the need to consider the respective costs and benefits of liability rules and property rules when selecting the appropriate standard for IP law).

diminish the incentive to develop creative goods. There is an inherent risk of incorrect valuations associated with the application of liability rules,²⁷² increased in the context of intellectual property, due to the essential uniqueness of most IP goods.²⁷³ The Writers address the possibility of valuation errors, but do not view such errors as problematic because they assume a symmetrical distribution of such errors.²⁷⁴ This assumption, however, is not based on any empirical data, and it may be the case that courts often err and set damages too low.²⁷⁵ Furthermore, even if creators and inventors know in advance that they are entitled to fair compensation for non-consented uses of their works, they are unlikely to value such compensation as highly as they would value the ability to simply control decisions related to the commercialization of their works.²⁷⁶

Surely, bargaining toward a voluntary agreement between the parties can still occur under liability rules.²⁷⁷ However, the parties may not

272. In general, a voluntary agreement between parties is considered more efficient than a solution dictated by an external decision maker under a liability rule because such an agreement most precisely corresponds to the needs of the parties who have better information about the relevant parameters. See Arlen, *supra* note 11, at 1769 (“Proposals designed to address biases generally entail the intervention of judges, legislators, or bureaucrats who are also subject to various biases.”); Jolls & Sunstein, *supra* note 7, at 233 (noting that policymakers and administrators will often suffer from bounded rationality themselves); James E. Krier & Stewart J. Schwab, *Property Rules and Liability Rules: The Cathedral in Another Light*, 70 N.Y.U. L. REV. 440, 453 (1995) (pointing out that problems in obtaining and processing information might impede efficient decision making by the judge in liability rule cases).

273. See, e.g., Merges, *supra* note 266, at 2664 (“Because each asset covered by an [intellectual property right] is in some sense unique . . . [i]t is difficult for a court in an infringement case to properly value the right-holder’s loss. Hence, the parties should be left to make their own deal.”).

274. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 51; Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 35 (noting that symmetrical mispricing may not create substantial *ex ante* disincentives to create).

275. See Korobkin, *supra* note 5, at 1283 (noting that “courts might err and set damages that are too low” and explaining that such undercompensation would encourage inefficient entitlement transfers); see also Lewinsohn-Zamir, *supra* note 5, at 249–50 (discussing the risk of systematic undercompensation that might result from a gap between the compensation rule used by the courts (objective market value) and owners’ higher subjective valuation of the entitlement, which may be intensified due to the enhanced endowment effect that can be expected under liability rules); Merges, *supra* note 121, at 1304 (expressing a concern that “because of the idiosyncratic value of [intellectual property rights], a liability rule will sometimes be set too low”).

276. See, e.g., Lewinsohn-Zamir, *supra* note 5, at 247 (arguing that “liability rules lead to greater intervention in individuals’ free will and autonomy than is necessary”); see also Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 28–29 (pointing out that a surprisingly large number of Authors and Owners in the first experimental set reported a WTA price equal to the amount of the prize, indicating that they refused to sell their chance to win the prize and suggesting that this may “point to the high regard that some people have for property rules that protect their right to reject transfers”).

277. See generally Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 YALE L.J. 1027, 1059–60 (1995) (arguing that

always be motivated to engage in bargaining. Furthermore, scholars have argued that such bargaining efforts, even when they take place, are much more prone to failure than bargaining under property rules.²⁷⁸ Among other problems, liability rules may discourage potential users of IP from offering owners a fair division of the profits in the pre-taking bargaining phase.²⁷⁹ The Writers do not provide a convincing argument for why, in the context of the Studies, this would not occur, and they seem to accept the non-market pricing entailed by liability rules as a reasonable solution. In essence, then, the role attributed to liability rules by the Writers is an “insulating” rather than a “debiasing” role.²⁸⁰

As part of their discussion, the Writers rely on a previous study conducted by Rachlinski and Jourden²⁸¹ that specifically examines the impact of the choice between property rules and liability rules on the endowment effect. In Rachlinski and Jourden’s experiment, a stronger endowment effect was manifested when the entitlement was protected by a property rule than when it was protected by a liability rule.²⁸² Other scholars have noted the dearth of data and definitive need for further empirical work in such context,²⁸³ and Rachlinski and Jourden’s conclusion that the endowment effect is heightened under property rules has been criticized as unsubstantiated.²⁸⁴ Professor Lewinsohn-Zamir, in particular, takes the opposite position and argues that the endowment effect is likely to be less pronounced under a

bargaining in the shadow of liability rules may actually be superior because such rules induce owners to reveal their true valuation of the entitlement).

278. See Lewinsohn-Zamir, *supra* note 5, at 239 (drawing on insights from behavioral and psychological studies to demonstrate the potential for bargaining failure under liability rules).

279. See *id.* at 243–44 (“Since potential takers under liability rules can usually keep all the gains for themselves and do not face the risk of rejection from owners, they have little incentive to offer owners an acceptable compromise in the bargaining stage.”); see also *id.* at 257 (predicting that offers of unacceptable compensation may lead, in turn, to “inevitable rejections by owners, the failure of the negotiation stage, and the subsequent need for coerced transfers”); Merges, *supra* note 121, at 1305 (noting that in the IP context, a liability rule acts as a ceiling on valuation because it only allows for bargaining downward from the liability rule).

280. See *supra* notes 252–259 and accompanying text (discussing the difference between debiasing and insulating techniques).

281. See Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 14 (referring to Rachlinski and Jourden’s study as “[m]ost important for this article”); Rachlinski & Jourden, *supra* note 139, at 1574–76 (arguing that the endowment effect may not apply if the entitlement in question is protected with a liability rule rather than a property rule).

282. See Rachlinski & Jourden, *supra* note 139, at 1574–76.

283. See, e.g., Arlen, *supra* note 11, at 1779 n.53 (highlighting the need for further analysis of the impact of remedies on the endowment effect); Jolls & Sunstein, *supra* note 7, at 222 (noting that Rachlinski and Jourden’s study involved environmental amenity entitlements as opposed to IP entitlements, and suggesting that further empirical work could shed light on the effect of liability and property rules in the IP context).

284. See Lewinsohn-Zamir, *supra* note 5, at 254 (listing various reasons why Rachlinski and Jourden’s argument should be viewed skeptically).

property rules regime than under a liability rules regime.²⁸⁵ She reasons that property rules focus attention on the profits of an exchange rather than the loss because owners only sell entitlements voluntarily. Under a liability rule regime, the pain of selling would be greater because a transaction is (or can be) forced upon an unwilling owner inducing an attitude of resistance.²⁸⁶ In any event, Rachlinski and Jourden's study may not be relevant to the case of IP entitlements because it studied environmental entitlements.²⁸⁷ The subjects participating in the study may have believed it would be improper to sell an environmental resource that one can protect under a property rule regime, which may be the cause of the observed endowment effect.²⁸⁸ Under liability rule protection, such a belief was undermined "because the law permitted the destruction of the resource for a price."²⁸⁹ It is not clear, then, whether the results of Rachlinski and Jourden's study even suggest that liability rules will reduce the endowment effect generally, or whether the results are only relevant to situations in which "high WTA prices under property rules reflect a community perception that selling that type of entitlement is immoral—a perception that could be weakened by protecting the entitlement with only a liability rule."²⁹⁰

B. Formalities

The Writers also suggest imposing various "formalities" in connection with copyright law in order to limit the effect of property-rule remedies employed thereunder to works that meet a substantial valuation threshold. Their claim is that for copyrighted and patented works with significant commercial value, parties may use tools such as "running royalties"

285. *Id.* at 222, 251.

286. *Id.* at 254. *But see* Korobkin, *supra* note 5, at 1285–86 (critically noting that Lewinsohn-Zamir appears to compare entitlement owners under a property rule regime who wish to sell, on the one hand, to entitlement owners under a liability rules regime who do not wish to sell, on the other, and suggesting that there may be as many owners under a property rules regime with no interest in selling as under a liability rule regime). At least in the context of IP licensing, as explained above, it seems likely that most owners will want to "sell" due to high transaction demand. *See supra* notes 95–104 and accompanying text; *see also* Liberman et al., *supra* note 59 (supporting Lewinsohn-Zamir's thesis by showing that a "promotion focus," in contrast to a "prevention focus," lowers the endowment effect).

287. Rachlinski & Jourden, *supra* note 139, at 1561–66.

288. *See generally* Rachlinski & Jourden, *supra* note 139 (discussing the "disutility of selling" explanation for the endowment effect).

289. *See* Korobkin, *supra* note 5, at 1285 (concluding that "the results may have been driven by what the choice of remedies says about society's commitment to the environment").

290. *Id.*; *see also* Jolls & Sunstein, *supra* note 7, at 222 (noting that absent the societal commitment to environmental amenities, for which people often demand a great deal, it remains possible that the choice between property and liability rules would not have the same impact on WTA versus WTP).

arrangements²⁹¹ to reduce the effect of valuation anomalies. In other cases, the Writers argue, the value of the transaction may not be high enough to warrant the expenses accrued by the use of such tools, and therefore IP law's property-like protection should not be available.²⁹² The Writers acknowledge, however, that in light of international obligations, the United States is "not free . . . to reintroduce to copyright law the traditional formalities . . . which remove all rights in a work upon a finding of noncompliance."²⁹³ Therefore, as a substitute, the Writers suggest revising copyright law's remedies in order to construct "an effective liability rule" for unregistered—and hence, low-value—works:²⁹⁴ they propose conditioning the availability of disgorgement and injunctive relief upon timely registration of the work.²⁹⁵

While the Writers acknowledge that reintroducing formalities into copyright law may be problematic due to international obligations, they fail to examine the substantive costs associated with formalities. One such cost concerns the numerous works that generate high social value but low private value, and that upon the introduction of costly formal screens may cease to be produced.²⁹⁶ This cost would continue to exist, even if the 'punishment' for the untimely registration is not a complete deprivation of copyright law, but merely a deprivation of the remedies of disgorgement and injunctive relief. Another cost of the suggested reform is that it may result in arbitrary and unjust forfeitures of remedies in cases where non-compliance with the formal registration requirement is unintentional.²⁹⁷

A different problem with the Writers' suggestion is that in cases where the additional copyright formalities are not met, they suggest depriving the owner entirely of the important remedies of disgorgement and injunctive relief. This means that if, for example, the copyright owner of a literary work who has not met the timely registration requirement were to sue another person who copied her work without permission, a court

291. A "running royalty" is an arrangement in which periodic payments are made according to some percentage of sales or revenues. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 36 (noting that such arrangement "is a way of effectively 'agreeing to disagree' over the value" of the work at hand).

292. *Id.* at 37–38.

293. *Id.* at 40.

294. *Id.*

295. *Id.* at 41–42.

296. See Jonathan S. Masur & David Fagundes, *Costly Intellectual Property*, 64 VAND. L. REV. (forthcoming 2012) (manuscript at 48), available at <http://ssrn.com/abstract=1441987> ("Costly screens would select against low private value, high social value copyrights, causing society to bear the losses that result when such works go unproduced."); see also *id.* (manuscript at 53) (adding that "[t]he costlier the screen, the more likely it is that authors will decline to create works [when] they are skeptical of clearing the value of the screen").

297. Cf. H.R. REP. NO. 94-1476, at 143–44 (1976) ("One of the strongest arguments for revision of the present statute has been the need to avoid arbitrary and unjust forfeitures now resulting from unintentional or relatively unimportant omissions or errors in the copyright notice").

could not grant injunctive relief against the imitator, even though the endowment effect has nothing to do with this scenario. In other words, even if the so-called endowment effect “problem” exists, the Writers’ recommendation appears to be overly broad, affecting situations not even potentially caused by the endowment effect.

C. Fair Use

Buccafusco and Sprigman also suggest utilizing doctrines like fair use to allow secondary uses that would not otherwise have been permitted in the presence of an endowment effect.²⁹⁸ In their words, as part of the fair use analysis, “courts should consider whether a license for the use at issue . . . would likely be subject to significant endowment effects,” and in such cases, a finding of fair use is more appropriate.²⁹⁹

Treating a certain use as a fair use and allowing such a use just because a gap exists between the price demanded by the seller (WTA) and the price that the licensee is willing to pay (WTP) is not justified. As explained above, the gap between WTA and WTP can be caused by a variety of factors, and the WTP value is not always the correct measure.³⁰⁰ It is not necessarily more efficient, in every situation where the WTA of one party is higher than the WTP of the other party, to allocate the entitlement to the latter.³⁰¹ In this context, it is worth pointing out that the (theoretical) WTA value of the potential user may be higher than her (current) WTP value. For instance, a consumer of music might place a higher value on the right to make copies of a purchased CD once she owns such a right.³⁰² Such WTA value may exceed or fall beneath the value that the music producer currently assigns to her right to prevent copying, and this may have different implications on the question of what is considered the most efficient allocation of the right. Because there are multiple unknown parameters, some scholars have gone so far as to argue that fair use jurisprudence must rely altogether on values other than efficiency.³⁰³

298. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 42–44. The fair use doctrine in copyright law authorizes courts to perform a case-by-case determination of whether a particular use of a copyrighted work that would otherwise constitute an infringement is nevertheless a fair use and therefore exempt from liability. *See also* 17 U.S.C. § 107 (2011).

299. Buccafusco & Sprigman, *Valuing*, *supra* note 4, at 44.

300. *See supra* notes 139–147 and accompanying text. *See also* Korobkin, *supra* note 8, at 665–66 (arguing that neither WTA nor WTP is the most appropriate measure of value in all situations).

301. In order to determine the most efficient allocation in a given case, there is actually a need to determine both parties’ WTA and WTP values as well as the cause of the gap for each. *See generally* Korobkin, *supra* note 8, at 664–83.

302. *See* Alfred C. Yen, *Restoring the Natural Law: Copyright as Labor and Possession*, 51 OHIO ST. L.J. 517, 545–46 (1990).

303. *See id.* at 558.

Furthermore, fair use is an all or nothing solution.³⁰⁴ Under the fair use doctrine, the user who is permitted to make the fair use does not have to pay the copyright owner anything for such use. This seems, again, like an excessive response to the endowment effect problem. Even if there is a WTA/WTP gap, and even supposing WTP is the right measure, allowing the use under the fair use doctrine means that even a lower price will not be paid to the owner. There is no justification for such a result.

Another problematic aspect of the fair use solution is that the fair use doctrine requires a case-by-case determination by courts.³⁰⁵ In practice, it is unrealistic to expect that courts would be able to determine whether a license is likely to be subject to significant endowment effects in a specific case. In any given case, the endowment effect is just one of multiple factors that may contribute to the valuation of an entitlement.³⁰⁶ Moreover, as explained above, the endowment effect itself may be the result of various factors, only some of which necessarily warrant correction.³⁰⁷ Requiring courts to perform such inquiries on a case-by-case basis would not only add costs to IP litigation, but also might result in errors that would impose a high cost on society by reducing incentives to create.

D. Ownership

In order to deal specifically with the so-called “creativity effect,” the Writers also suggest restructuring the rules pertaining to initial ownership of IP to increase instances where initial ownership vests “in some person or firm other than the creator.”³⁰⁸ Their hope is that “transacting will be more efficient when rights to creative goods are in the hands of intermediaries” rather than authors or inventors.³⁰⁹

Once again, even if their suggestion appropriately mitigated the endowment effect, absent from their discussion is an examination of their proposal from other relevant perspectives. Taking ownership away from the creator and vesting it in a different entity may have a significant negative ef-

304. See, e.g., O'Rourke, *supra* note 264, at 1188 (noting that a successful fair use defense imposes a “royalty-free compulsory license” on the copyright owner).

305. See Gideon Parchomovsky & Kevin A. Goldman, *Fair Use Harbors*, 93 VA. L. REV. 1483 (2007) (suggesting the adoption of nonexclusive safe harbors that define minimum levels of copying as per se fair uses).

306. Other factors may include, for example, strategic reasons or anti-competitive motives.

307. See *supra* Part IV.B.

308. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 49. The Writers note that in the copyright context, this means revisiting the scope of the rules governing whether a particular work is treated as a work made for hire, while in the patent context, this means reconsidering the current law's strict inventorship requirement.

309. *Id.* at 48–49.

fect on incentives to create.³¹⁰ It may also undermine other goals that undergird our IP system, in particular the desire to provide just reward for labor and to enable individuals to develop their personality.³¹¹

It is not even clear that following this shifting-ownership suggestion would achieve its desired effect of mitigating the endowment effect. In general, there is only a limited amount of evidence regarding whether the endowment effect is as strong for agents as for principals involved in a transaction.³¹² While the second study conducted by the Writers indicates that creators may have a higher degree of optimism than mere owners with respect to the potential commercial success of the work, this study is not necessarily representative of real life situations where the inventive or creative activity is sponsored by another entity. The sponsor in some cases may not even want to commercialize the work, e.g., when she ordered the work in order to use it in a private manner for a specific purpose. If ownership is shifted to the creator's employer, it is not clear that the employer will have a lesser degree of optimism with respect to the commercialization of the work than the individual creator. The employer is often invested in the work in many ways that may cause her to similarly attach a high price to the work. Inasmuch as emotional attachment constitutes an important factor affecting the valuation of IP goods,³¹³ such an attachment can be developed by an owner even if she did not create the work herself.³¹⁴

Finally, the Writers propose to restructure the work made for hire doctrine in copyright law as a default rule, vesting initial ownership in the hands of the sponsor whenever authorship involves non-de-minimis sponsorship, subject only to an agreement by the parties to the contrary.³¹⁵ The Writers make a similar suggestion with respect to patent law.³¹⁶ In making such proposals, however, they overlook the possibility that the very effect they focus on, the endowment effect, may create "stickiness" of such default rules: the parties may view the default arrangement as a status quo endowment and fail to contract around it even if it is not the most efficient

310. See John P. Sutton, *The Inventor's Interest*, in *PATENT POLICY: GOVERNMENT, ACADEMIC, AND INDUSTRY CONCEPTS* 150, 152–53 (Willard Marcy ed., 1978) ("It is the inventor who is to be encouraged, not the investor of mere money.").

311. See *supra* notes 244–246 and accompanying text (presenting these considerations derived from labor and personality theories); see also Cherensky, *supra* note 210 (discussing in detail the personhood interest of employee-inventors in their inventions).

312. Cf. Korobkin, *supra* note 5, at 1241 n.76 (noting that empirical research is badly needed on the question of whether corporate decisions are generally as affected by the endowment effect as individual decisions).

313. See *supra* Part IV.B.1.

314. See Tur-Sinai, *supra* note 125, at 28 (noting the possibility that an owner of an invention by assignment would gradually develop, as a result of her business and commercial uses of it, a personality interest in such invention, especially if the public recognizes her as the owner of said invention).

315. Buccafusco & Sprigman, *Creativity*, *supra* note 4, at 49.

316. *Id.* at 50.

arrangement.³¹⁷ This seems a particularly likely result in the context of employment contracts in light of the inherent inequity of bargaining power between the parties.

CONCLUSION

This Article contains a critical analysis of Buccafusco and Sprigman's recent Studies exploring the existence of the endowment effect in IP transactions. The analysis leads to the conclusion that the Studies do not provide sufficient justification for the normative proposals made by the Writers.

As set forth in this Article, the novelty and importance of the empirical findings are overstated. The experimental setting used fails to mimic real markets for IP goods and thus the effects observed in the Studies are not representative of real life problems.

Yet, even if the endowment effect did affect owners' and creators' valuations of creative goods, it would not constitute sufficient ground for legal intervention. A major consideration in this regard is the reason the endowment effect exists in the first place. While the Writers assert that emotional attachment has very little to do with the high valuations of creators, this Article shows that such attachment is actually likely to have a significant impact on creators' pricing decisions. Thus, "debiasing" cannot be justified. A legal system that does not respect the special bond that develops between a creator and her work acts against some of the major goals that IP law is designed to promote.

An additional factor that appears to affect creators' and owners' valuation of IP goods is over-optimism. While the Writers view such over-optimism as a mistake that needs to be corrected, this Article claims that over-optimism may prove useful in securing the desired level of incentives to develop creative goods. Moreover, over-optimism is likely to correct itself in the dynamic bargaining process that takes place in the market, thereby rendering any external intervention unwarranted.

The Article also examines the specific proposals made in the Studies and finds them wanting. Even if there were grounds for legal intervention arising out of the Studies, the specific proposals made by the Writers are overbroad and not sufficiently tailored to address the specific problem supposedly posed by the endowment effect. Adopting such proposals may instead result in an inefficiently reduced level of IP protection to the detriment of society and the creators of IP goods alike.

317. See Russell Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608, 612 (1998) ("[C]ontracting parties view default terms as part of the status quo, and they prefer the status quo to alternative states, all other things equal."); see also *id.* at 665 ("[The] status quo bias makes it impossible to be sure that the failure to contract around the default rule signifies that the default term is efficient for the parties, even absent transaction costs and private information.").

Notwithstanding the critical observations set forth above, the experimental Studies conducted by Buccafusco and Sprigman constitute a promising beginning for a line of research considering the interplay between the endowment effect and IP law. In presenting a critique of the Writers' Studies and analysis while suggesting various follow-on experiments,³¹⁸ this Article seeks to contribute to the scholarly effort advanced by the Writers.

318. See *supra* notes 55, 91, 196; *supra* text accompanying notes 70–71, 77.